UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

RCRA FINAL DECISION

FOR

KEYSTONE STEEL & WIRE COMPANY
PEORIA, ILLINOIS
OCTOBER, 2005

FINAL DECISION AND RESPONSE TO COMMENTS
SELECTION OF FINAL REMEDIAL ALTERNATIVE
FOR
KEYSTONE STEEL & WIRE COMPANY
PEORIA, ILLINOIS

Introduction

This Final Decision and Response to Comments (FDRTC) is presented by the United States Environmental Protection Agency (U.S. EPA) for the Keystone Steel & Wire Company (KS&W) facility located at Peoria, Illinois. Included in this document is the previously issued Statement of Basis (Attachment 1), (Attachment 2) facility location, (Attachment 3) facility layout map, and (Attachment 4) location of areas to be remediated and the Final Decision. The Statement of Basis provided the proposed remedy and was made available for public review and comment from August 1, 2005 to September 16, 2005. No comments were received during the public comment period. This FDRTC selects the final remedy to be implemented at the KS&W Company facility based on the Administrative Record.

Assessment of the Site

The response action documented in this FDRTC is necessary to protect human health and the environment.

Selected Remedy

U.S. EPA has selected the following remedial components as the remedy to address contamination at the **F-Pond:**

A) Dewatering of the F-Pond; identification of characteristically hazardous soils/sediments; in-situ treatment of characteristically hazardous soils/sediments, if present, to render the soils/sediments non-hazardous, when generated; excavation of the treated and impacted soils/sediments to achieve the remediation goals; off-site disposal of the excavated soils/sediments as non-hazardous waste at a Subtitle D disposal facility; deed restrictions on the F-Pond to limit future use of the unit to commercial/industrial purposes; restoration of the excavated portions of the F-Pond under the Nationwide Permit 38

The KS&W Company must also demonstrate that adequate funds will be available to complete the construction as well as the operation and maintenance of the selected remedy. KS&W must provide this financial assurance within 90 days after U.S. EPA selects the remedy and issues its *Final Decision and Response to Comments*. Any of the following financial mechanisms may be used to make this demonstration: financial trusts, surety bonds, letters of credit, insurance, or qualification as a self-insurer by means of a financial test. KS&W may request that the amount of the financial assurance be reduced substantially after successfully completing construction, and again from time to time during the operation and maintenance phase of the remedy.

The remedy selected by this FDRTC is the same as the remedy which was proposed in the Statement of Basis. The selection of this remedy is based on the following reasons: (1) the facility does not pose acute risks to humans and other ecological receptors; (2) the preponderance of wastes at these units will be treated and rendered non-hazardous; (3) the Peoria community and the neighboring communities do not use the groundwater as a drinking water source since drinking water supplies are already provided by the local governments in the area; (4) the remedy is consistent with U.S. EPA's policy to encourage facility owners to redevelop and reuse impacted land; (5) the alternative does not require complex operation or frequent maintenance; and (6) the cost effectiveness of the remedy is enhanced by implementing these remedies.

Public Participation

A forty-five (45) day public comment period was held from August 1, 2005 to September 16, 2005. No comments were received during the public comment period.

Administrative Record

The Administrative Record upon which the final remedy was selected is available at Peoria Public Library Peoria, Illinois and the Waste Management Division Records Center of the U.S. EPA, Region 5 office.

requirements; and implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater.

U.S. EPA has selected the following remedial components to address contamination at the **North Ditch Staging Area**:

B) Identification of characteristically hazardous soils; excavation and treatment of characteristically hazardous soils, if present, within a designated storage/treatment Corrective Action Management Unit (CAMU) to render the soil non-hazardous and meet the applicable land disposal restrictions (LDR); excavation of impacted soils to achieve the remediation goals; off-site disposal of the excavated and treated soils as non-hazardous waste at a Subtitle D disposal facility; deed restrictions on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes; and implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater. The components of this alternative are further described below.

U.S. EPA considers corrective action for groundwater to be complete when all releases to groundwater, including releases from Solid Waste Management Units (SWMUs), have been remediated. Groundwater cleanup objectives include three components: achieving all established groundwater specific cleanup levels, determining appropriate point of compliance, and meeting timely and appropriate remediation time frames. The point of compliance for corrective action should be throughout the area where groundwater is contaminated above cleanup levels, or, when waste is left in place, at and beyond the boundary of the waste. U.S. EPA refers to this point of compliance as the "throughout-the plume/unit boundary" point of compliance. Therefore, for the current groundwater contamination, KS&W shall continue to operate the ongoing pump and treat system to meet the previously determined concentration levels set by the Illinois Environmental Protection Agency (IEPA) in the groundwater management zone (GMZ). Also, KS&W shall continue to comply with the ongoing pump and treatment schedules within the GMZ as established by IEPA.

For the **F-Pond** and the **North Ditch Staging Area**, U.S. EPA is proposing that KS&W also implement a one-time groundwater sampling and analysis program to demonstrate that there are no impacts to groundwater from these areas. Hazardous constituents to be analyzed from the newly installed monitoring wells will be the same as those previously detected from these areas. A more detailed discussion of the selected remedy is discussed in the Administrative records.

Declaration

Based on the Administrative Record compiled for this corrective action, U.S. EPA has determined that the selected remedy for the KS&W Company facility is appropriate and is protective of human health and the environment.

Date 10/13/05

Margaret Guerriero Director
Waste Pesticides and Toxics Division
U.S. Environmental Protection Agency
Region 5

Attachments

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Invites
Public Comment
on the
STATEMENT OF BASIS for
KEYSTONE STEEL & WIRE COMPANY
PEORIA, ILLINOIS

The United States Environmental Protection Agency (U.S. EPA) is managing environmental corrective action at the Keystone Steel & Wire Company facility, located in Peoria, Illinois. The corrective action is being performed by Keystone Steel & Wire Company under the authority of the Resource Conservation and Recovery Act (RCRA). The Statement of Basis prepared by the U.S. EPA provides a summary of Keystone Steel & Wire Company's investigation of contamination at and from their facility, and a summary of Keystone Steel & Wire Company's study of viable remedies. This Statement of Basis also specifies the remedies proposed by the U.S. EPA to clean up contamination at and from the facility.

The U.S. EPA is issuing this Statement of Basis as part of its public participation responsibilities under RCRA. The fact sheet summarizes information that can be found in greater detail in the RCRA Facility Environmental Indicator Assessment Report and other site related documents contained in the administrative record for this facility. These documents can be found in the information repository located at:

Peoria Public Library
107 NE Monroe Street
Peoria, Illinois 61602
(309) 497-2000

Alpha Park Public Library
3527 South Airport Road
Bartonville, Illinois 61607
(309) 697-3822

The public notice regarding the corrective action to be performed can be viewed at http://www.epa.gov/reg5rcra/wptdiv/permits/index.htm The U.S. EPA will accept and consider public comments on the proposed plan from August 1 through September 16, 2005 . Written comments can be submitted to the U.S. EPA at the address listed below.

Written comments can be sent to:

Jonathan Adenuga
U.S. Environmental Protection Agency
77 West Jackson Boulevard, DE-9J
Chicago, Illinois 60604
call toll free (800) 621-8431 or directly (312) 886-7954

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

DM-7J

July 29, 2005

RE: Corrective Action
Keystone Steel & Wire site
Peoria, Illinois
ILD 000 714 881

Dear Interested Party:

On July 29, 2005, in the Peoria Journal Star Newspaper, the U.S. Environmental Protection Agency (U.S. EPA) announced corrective action proposed in accordance to the U.S. EPA's Resource Conservation and Recovery Act (RCRA)at the Keystone Steel & Wire site in Peoria, Illinois.

Enclosed is a copy of the Public Notice and Statement of Basis providing additional information on the corrective action being performed. These same records are available for public inspection at the Peoria Public Library, 107 NE Monroe Street, Peoria, IL and at the Alpha Park Public Library, 3527 South Airport Road, Bartonville, IL. Documents are also available at the U.S. EPA located at 77 West Jackson Boulevard, Chicago, Illinois. Files at the U.S. EPA may be reviewed between 8:30 a.m. and 4:00 p.m., Monday through Friday in the 7th floor Record Center.

The U.S. EPA is seeking public comment on the proposed corrective action. Comments must be received by September 16, 2005, and should be sent to the following address:

U.S. EPA, Region 5
77 West Jackson Boulevard DE-9J
Chicago, Illinois 60604-3590
Attn: Jonathan Adenuga
adenuga.jonathan@epa.gov

The U.S. EPA will consider all comments received during the public comment period prior to making its final decision. Each person who submitted written comments or requested notice of the decision will receive notice of the final decision. At the time of the final decision, the U.S. EPA will respond to all significant comments. No Hearing is scheduled at this time.

If you have any questions pertaining to this matter, please contact Jonathan Adenuga (312) 886-7954.

Sincerely

Terri J. Rancher, EPS
Information Management Section
Waste Pesticides and Toxics Division
U.S. EPA, Region 5

Enclosures

STATEMENT OF BASIS

for

Keystone Steel and Wire Company
EPA ID NO. ILD 000 714 881
Peoria, Illinois

July 2005

Keystone Steel and Wire Company
Peoria, Illinois

INTRODUCTION

This Statement of Basis (SB) for Keystone Steel and Wire Company (KS&W) explains the proposed remedy for the collection, treatment and removal of hazardous waste from an onsite pond (F-Pond) and the North Ditch Staging Area at the facility in Peoria, Illinois. In addition, the SB includes summaries of all corrective measure alternatives analyzed by KS&W. U.S. EPA will select a final remedy for the facility only after the public comment period has ended and the information provided by the public during this period has been reviewed and substantive comments considered.

The U.S. EPA is issuing this SB as part of its public participation responsibilities under the Resource Conservation and Recovery Act (RCRA). The document summarizes information that can be found in greater detail in the February 2001 Current Conditions Report and the January 2002 Environmental Indicators (EI) Determination Report and other pertinent documents contained in the Administrative Record for this facility. U.S. EPA encourages the public to review these documents in order to gain a more comprehensive understanding of the facility and the RCRA activities that have been conducted. The public can be involved in the remedy selection process by reviewing the documents contained in the Administrative Record.

U.S. EPA may modify the proposed remedy or select another remedy based on new information or public comments. Therefore, the public is encouraged to review and comment on **all** alternatives.

PROPOSED REMEDY

The U.S. EPA is proposing the following remedy to address all contamination at the **F-Pond:**

1) Dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments; 3) in-situ treatment of characteristically hazardous soils/sediments, if present, to render the soils/sediments non-hazardous, when generated; 4) excavation of the treated and impacted soils/sediments to achieve the remediation goals; 5) off-site disposal of the excavated soils/sediments as non-hazardous waste at a Subtitle D disposal facility; 6) deed restriction on the F-Pond to limit future use of the unit to commercial/industrial

purposes; and 7)implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater.

The U.S. EPA is proposing the following remedy to address all contamination at the **North Ditch Staging Area**:

1) Identification of characteristically hazardous soils; 2) excavation and treatment of characteristically hazardous soils, if present, within a designated storage/treatment Corrective Action Management Unit (CAMU) to render the soil non-hazardous and meet the applicable land disposal restrictions (LDR); 3) excavation of impacted soils to achieve the remediation goals; 4) off-site disposal of the excavated and treated soils as non-hazardous waste at a Subtitle D disposal facility; 5) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes; and 6)implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater. The components of this alternative are further described below.

The U.S. EPA considers corrective action for groundwater to be complete when all releases to groundwater, including releases from Solid Waste Management Units (SWMUs), have been remediated. Groundwater cleanup objectives include three components: groundwater cleanup levels, point of compliance, and remediation time frames. Point of compliance for corrective action should be throughout the area where groundwater is contaminated above cleanup levels, or, when waste is left in place, at and beyond the boundary of the waste. U.S. EPA refers to this point of compliance as the "throughout-the plume/unit boundary" point of compliance. Therefore, for the current groundwater contamination, U.S. EPA proposes that KS&W continue to operate the ongoing pump and treat system to meet the concentration levels set by the IEPA in the Groundwater management zone (GMZ). For the F-Pond and the North Ditch Staging Area, U.S. EPA is proposing that KS&W also implement a one-time groundwater sampling and analysis program to demonstrate that there are no impacts to groundwater from the F-Pond and North Ditch Staging Area. All hazardous constituents reported in these two units will be analyzed in all groundwater samples collected from the monitoring wells to be installed at these units. A more detailed discussion of the proposed remedy is included below.

The U.S. EPA is also proposing that KS&W must demonstrate that adequate funds will be available to complete the construction as well as the operation and maintenance of the proposed remedy. KS&W must provide this financial assurance within 90 days after U.S. EPA selects the remedy and issues its *Final Decision and*

Response to Comments. Any of the following financial mechanisms may be used to make this demonstration: financial trusts, surety bonds, letters of credit, insurance, or qualification as a self-insurer by means of a financial test. KS&W may request that the amount of the financial assurance be reduced substantially after successfully completing the construction, and again from time to time during the operation and maintenance phase of the remedy.

FACILITY BACKGROUND

The site is located at 7000 South Adams Street, Peoria, Illinois. The facility is just east of U.S. Route 24, south the intersection of Routes 24 and 474, and about one mile west of the Illinois River. The facility manufactures iron and steel including semi-finished and finished wire products. The facility occupies about 1,410 acres and has operated since around 1900.

Soil and groundwater in several areas at the facility are contaminated at levels above appropriately protective risk-based standards. The risk based standards used for this determination are the U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) or the Illinois risk-based remediation objectives. Most of these contaminated areas at the facility are units undergoing closure in compliance with a 1993 Consent Order issued by the Illinois Environmental Protection Agency (IEPA) to KS&W. Corrective action and closure of a majority of these areas has been done under the supervision of the IEPA. These areas include the following: a) South Ditch, b) South Borrow Area Waste Pile, c) Lower South Ditch, d) Soil Stained Area, e) North Ditch, f) Surface Drainage Ditch Area, g), h) Mid Mill Ditch, and i) North and South Dredged Pile.

In 1994, a (GMZ) was approved by IEPA under the 1993 Consent Order to control and begin remediation of a plume of contaminated groundwater that extends under most of the Mid Mill portion of the facility. The groundwater plume is controlled and remediated via a groundwater pump and treat system consisting of four purge wells and an air stripper tower. The plume contains 1,4-dioxane, 1,1-dichcloroethane, 1,1-dichloroethene, trans-1,2-DCE, cis-1,2-DCE, terachloroethene, trichloroethylene, trichloroethene and vinyl chloride. Total volatiles concentrations throughout the GMZ have already been reduced to below one part per million and the action of the pump and treat system continues to reduce the area and extent of the plume.

In December 19, 2000, the U.S. EPA issued an Administrative Order on Consent (AOC) to KS&W compelling KS&W to identify the nature

and extent of any releases of hazardous waste or hazardous constituents from five Solid Waste Management Units (SWMUs) at the facility: a) the Sheen Pond; b) the F-pond; c) the Tail Track Landfill; d) the pond east of the Tail Track Landfill; and e) the Oil Skimming Basin. KS&W was required to submit an Environmental Indicators (EI) report demonstrating that KS&W has contained all current human exposure to contamination and has stabilized the migration of contaminated groundwater at or from the facility including the SWMUs mentioned above. The AOC also required that KS&W submit to U.S. EPA for review final corrective measure proposals for the five SWMUs by January 2003. The AOC requires KS&W to complete all final correctives measures within a reasonable period to protect human health and the environment.

CORRECTIVE MEASURES IMPLEMENTED

KS&W has continued making progress towards the closure of several units since the end of 2000. KS&W has demonstrated clean closure for the following units at the facility: a) the North Ditch; b) the Mid Mill Ditch; c) the Surface Drainage Ditch; and d) the North and South Dredged Pile. To address the remaining areas subject to closure under the IEPA Order, KS&W continues to investigate and submit closure and remedial proposals to the IEPA. Remedial action plans for the South Ditch, South Borrow Area and the Lower South Ditch were approved by the IEPA in November 2002. The current deadline for completing the remedial actions at these three Units is December 31, 2005.

Based on on the January 29, 2002 EI Assessment Report, KS&W has also continued the operation of the groundwater purge wells and the air stripper tower to control and remediate the plume of contaminated groundwater at the facility. Operations have resulted in a significant reduction in the GMZ area and significant reductions in overall containment concentrations throughout the plume. Chlorinated compounds such as TCE, 1,1,1,-TCA, vinyl chloride, 1,2-DCE, trans-1,2 have been detected in deep aquifer at the facility in varying concentrations. For example, 1,1,1-trichloroethane concentrations range from 25 ppb to 205 ppb, well above the recommended PRG of 5.4 ppb; trichloroethylene concentrations range from 65 ppb to 530 ppb, well above the PRG of 1.6 ppb. As of November of 2001, monitoring events indicate that the pump and treat method of remediation currently ongoing at the site has reduced the concentrations of total volatile concentrations throughout the plume to below 1 ppm. The plume circumference has been drastically reduced and contained within the facility boundary. No offsite migration of contaminated groundwater has ever been reported.

Also based on the EI Assessment Report, KS&W investigated four other areas originally not identified in the December 2000 AOC: the North Ditch Staging Area, the East Sludge Pond and the East West Pond; the Slag Processing Area; and the North and South Sludge Lagoons. Excluding the North Ditch Staging Area, the U.S. EPA concluded from these additional investigations that no further actions are warranted in the North and South Sludge Lagoons and the East Sludge Pond and the East West Pond.

SUMMARY OF FACILITY RISKS

Based on the results of the 2001 surface water samples collected from the F-Pond, iron and manganese were detected at 29 ppb and 47 ppb above the federal drinking water standard of 15ppb. TCE was also detected in one sample at 2 ppb. In the sediment samples collected from F-Pond, lead and iron were detected at concentrations above the industrial PRGs. Iron concentrations in the sediments range from 21,000 mg/kg to 140,000 mg/kg and lead concentrations range from 210mg/kg to 3,100 mg/kg. The results of the 1996 and 2002 sampling events at the North Ditch Staging Area also confirmed the presence of elevated lead in soils. Based on TCLP results, concentrations of lead in soils range from non-detect to 22 mg/kg and total concentrations for lead range from 380 mg/kg to 12,000 mg/kg. The levels of lead and iron contamination are above appropriately protective risk-based standards. The risk based standards used for this determination are the U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) or the Illinois risk-based remediation Objectives.

The goals of the selected remedy are to eliminate significant exposures that pose threats to human health and the environment, to clean up contaminated soils to levels consistent with current land use, to restore ground water to its maximum beneficial use, and to eliminate risks to human health by meeting the applicable health-based ground water protection standards. The proposed Remedy selection was based on the assumption that future use of the site will be industrial/commercial, consistent with the current property use. Each of the constituents detected at the site was retained as Potential Constituents of Concern (PCOCs) in groundwater, sediments and surface water. Since the F-Pond may be designated as a wetland, it is assumed that the excavated portion of the F-Pond will not be backfilled with clean fill, but may be restored in accordance with the requirements of Nationwide Permit 38 as-approved by the U.S. Army Corps of Engineers.

The site-specific corrective action objectives utilize an exposure prevention approach which either allows removal of waste

materials, activity restrictions or construction of engineered controls to prevent contact.

SUMMARY OF CORRECTIVE MEASURE ALTERNATIVES

The reasonable alternatives for addressing contamination at the KS&W facility are presented below.

Soil and Structures:
Access Restrictions
Deed Restrictions
In-situ Treatment/Off-site Disposal

Groundwater:
Groundwater Pump and Treat System
Alternate Water Supply
Groundwater Monitoring

All of the above alternatives were evaluated during the Corrective Measures Study. Based on the evaluation of these alternatives, the Corrective Measures Alternatives described below were proposed by KS&W for addressing contamination at the facility.

KS&W'S PROPOSED CORRECTIVE MEASURES ALTERNATIVES FOR ADDRESSING CONTAMINATION AT THE FACILITY

Several corrective measures alternatives were considered for the F-Pond and the North Ditch Staging Area during the development of this corrective measures study. The alternatives were developed based on RCRA's threshold screening criteria. Those criteria are as follows:

- Protecting human health and the environment;
- Attaining the applicable media cleanup standards; and
- Controlling the sources of the releases.

The alternatives considered for the F-Pond and North Ditch Staging Area that meet these criteria are described in the following sections. These proposed corrective measures are intended to address risks to human health and the environment under commercial/industrial land use scenarios.

F-Pond

Keystone has considered the following options for the remediation of lead and iron-impacted soils/sediments at the F-Pond.

Alternative No. 1: No Action

Alternative No. 1 consists of no action. Under this alternative, no remedial action or institutional controls will be implemented.

Alternative No. 2: In-situ Treatment/Off-site Disposal

Alternative No. 2 consists of the: 1) dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments; 3) in-situ treatment of characteristically hazardous soils/sediments, if present, to render the soils/sediments non-hazardous, when generated; 4) excavation of the treated and impacted soils/sediments to achieve the remediation goals; 5) off-site disposal of the excavated soils/sediments as non-hazardous waste at a Subtitle D disposal facility; and 6) deed restriction of the F-Pond to limit future use of the unit to commercial/industrial purposes. The components of this alternative are further described as follows:

- Surface water present in the F-Pond will be sampled to determine the nature and concentration of the contaminants of concern identified during previous investigations, i.e. lead, iron, manganese, and trichloroethylene (TCE). Based on these results, the surface water will be transferred directly to the facility's wastewater treatment plant (WWTP) for treatment, if needed, and discharge under the facility's industrial discharge permit. This discharge will be conducted by KS&W in compliance with the limits established in the NPDES industrial discharge permit.

- Samples will be collected from the F-Pond soil/sediment for laboratory analysis to determine if any of the soil/sediment exhibits the toxicity characteristic for lead (> 5 mg/l). A 50-foot by 50-foot coordinate grid system will be used to guide the collection of these characterization samples, i.e., composite sample will be collected from each 50-foot grid. The samples will be submitted for analysis of TCLP lead. Additional samples may be collected using the 50-foot grid system for delineation purposes, i.e. one composite sample per 50-foot grid. These samples will be submitted for analysis of total lead and total iron.

- Based on these results, soil/sediment that is determined to exhibit the toxicity characteristic for lead will be treated

in-situ within the footprint of the F-Pond using the appropriate additive and dosage rate required to render the soil/sediment non-hazardous, when generated. Upon the completion of in-situ treatment activities, composite samples will be collected to verify that the treatment criteria were achieved, i.e. <5 mg/l TCLP lead. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils/sediments with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 mg/kg total iron, will be dried or solidified, as needed, to ensure that free liquids are not present in the material for off-site disposal purposes.

- The treated soil/sediment and impacted soil/sediment with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 mg/kg total iron, will then be excavated to the appropriate depth, as guided by the use of an x-ray fluorescence (XRF) field screening unit. The excavated soil/sediment will be temporarily stockpiled within the limits of the F-Pond for consolidation purposes prior to off-site disposal as non-hazardous waste at a Subtitle D disposal facility.

- When XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. The post excavation confirmation samples will consist of composite samples collected from the bottom and sidewalls of the excavation using the established 50-foot by 50-foot coordinate grid system, i.e., composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead and iron. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil/sediment will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- The excavated portions of the F-Pond will be restored pursuant to the requirements of the Nationwide Permit 38 approved by the U.S. ACOE.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial

purposes. Refer to Figure 3 for a summary of the remedial activities associated with this corrective measure alternative for the F-Pond.

Alternative No. 3: Solidification/On-site Consolidation and Containment.

Alternative No. 3 consists of 1) dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments, if generated; 3) in-situ treatment of soils/sediments that may exhibit the toxicity characteristic for lead, if generated, to less than 5 parts per million (ppm); 4) solidification of the soil/sediments for stability purposes; 5) consolidation of the treated and impacted soils/sediments to one portion of the F-Pond; 6) placement of an engineered cover over the consolidated soils/sediments with concentrations of the constituents of concern that exceed the remediation goals; and 7) deed restriction of the F-Pond to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover. The components of this alternative are further described as follows:

- Surface water present in the F-Pond will be sampled to determine the nature and concentration of the contaminants of concern identified during previous investigations, i.e. lead, iron, manganese, and TCE. Based on these results, the surface water will be transferred directly to the facility's WWTP for treatment, if needed, and discharge under the facility's industrial discharge permit. This discharge will be conducted by KS&W in compliance with the limits established in the NPDES industrial discharge permit.

- Samples will then be collected from the F-Pond soil/sediment for laboratory analysis to determine if the soil/sediment exhibits the toxicity characteristic for lead (> 5 mg/l TCLP). A 50-foot by 50-foot coordinate grid system will be used to guide the collection of these characterization samples, i.e. one composite sample will be collected from each 50-foot grid. The samples will be submitted for analysis of TCLP lead. Additional samples may be collected using the 50-foot grid system for delineation purposes, i.e. one composite sample per 50-foot grid. These samples will be submitted for analysis of total lead and total iron.

- Based on these results, soil/sediment that is determined to exhibit the toxicity characteristic for lead, if generated,

will be treated in-situ within the footprint of the F-Pond using the appropriate additive and dosage rate required to achieve a concentration of less than 5 ppm TCLP lead. Upon the completion of in-situ treatment activities, composite samples will be collected to verify that the treatment criteria were achieved, i.e. <5 mg/l TCLP lead. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils/sediments with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 total iron, will be solidified to ensure that the material can support the weight of the engineered cover.

- The treated and solidified soils/sediments will be excavated to the appropriate depth required to achieve the remediation goals, as guided by the use of an XRF unit, for consolidation in one portion of the F-Pond.

- When the XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. The post excavation confirmation samples will consist of composite samples collected from the bottom and sidewalls of the excavated portions of the F-Pond using the established 50-foot by 50-foot coordinate grid system, i.e. one composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead and iron. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil/sediment will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- The excavated portions of the F-Pond will be restored pursuant to the requirements of the Nationwide Permit 38 approved by the U.S. ACOE.

- A groundwater monitoring program will be developed to confirm that there is no migration of the contaminants of concern.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover.

North Ditch Staging Area

Keystone has considered the following options for the remediation of lead-impacted soils at the North Ditch Staging Area:

Alternative No. 4: No Action

Alternative No. 4 consists of no action. Under this alternative, no remedial action or institutional controls will be implemented.

Alternative No. 5: CAMU Treatment/Off-site Disposal

Alternative No. 5 consists of the: 1) identification of characteristically hazardous soils; 2) excavation and treatment of characteristically hazardous soils, if present, within a designated storage/treatment corrective action management unit (CAMU) to render the soil non-hazardous and meet the applicable land disposal restrictions (LDR); 3) excavation of impacted soils to achieve the remediation goals; 4) off-site disposal of the excavated and treated soils as non-hazardous waste at a Subtitle D disposal facility; and 5) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes. The components of this alternative are further described as follows:

- Samples will be collected for laboratory analysis from the locations in the North Ditch Staging Area where samples were previously collected in December 2002 to determine if the soil exhibits the toxicity characteristic for lead (>5 mg/l TCLP).

- Based on these results, soil that is determined to exhibit the toxicity characteristic for lead will be excavated and temporarily stockpiled within the storage/treatment CAMU. (The storage/treatment CAMU will be located within the limits of the North Ditch Staging Area). The temporary soil stockpiles will then be treated using the appropriate additive and dosage rate required to render the soil non-hazardous and meet the applicable LDRs. Verification samples will be collected from the treated soil stockpiles at the frequency required to meet the receiving landfill's requirements to verify that the alternative LDR treatment standards for contaminated soil, pursuant to 40 CFR § 268.49, have been met. If the treatment criteria were not achieved, then in-situ treatment will continue until the

treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils with lead concentrations that exceed the remediation goal of 800 mg/kg will be excavated to the appropriate depth (estimated to be approximately 2 feet below ground surface), as guided by the use of an XRF field screening unit. The excavated soil will be temporarily stockpiled within the limits of the North Ditch Staging Area pending off-site disposal as non-hazardous waste at a Subtitle D disposal facility.

- When XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. Post-excavation confirmation samples will be collected from the excavation bottom and sidewalls using a 50-foot by 50-foot coordinate grid system, i.e. one composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- Clean fill from an on-site source located to the south of the Temporary Container Storage Area will be transferred to the North Ditch Staging Area for use as backfill. Samples will be collected from the fill material at a frequency of one sample per source and will be submitted for analysis of total RCRA 8 metals and total petroleum hydrocarbons (TPH) to determine if the fill is usable. The total RCRA 8 metals results will be compared to the Illinois TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties and the TPH concentration will not exceed 100 ppm. If the TPH concentration exceeds 100 ppm, then the sample will be analyzed for semi-volatile organic compounds (SVOC) and the results will be compared to the Illinois TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties. If the results are less than the applicable TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties, then the backfill source will be deemed clean for use. The fill will be placed in the excavation in specified lifts and compacted to original grade.

- A deed restriction will be required under this alternative to limit future use of the unit to

commercial/industrial purposes.

Alternative No. 6: In-situ Treatment/On-site Containment

Alternative No. 6 consists of the: 1) identification of characteristically hazardous soil; 2) in-situ treatment of soils that exhibit the toxicity characteristic for lead, if generated, to less than 5 ppm; 3) placement of an engineered cover over all soils with concentrations of the constituent of concern that exceed the remediation goals; and 4) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover. The components of this alternative are further described as follows:

- Samples will be collected for laboratory analysis from the locations in the North Ditch Staging Area where samples were previously collected in December 2002 to determine if the soil exhibits the toxicity characteristic for lead (>5 mg/l TCLP).

- Based on these results, soil that is determined to exhibit the toxicity characteristic for lead will be treated in-situ within the footprint of the North Ditch Staging Area using the appropriate additive and dosage rate required to achieve a concentration of less than 5 ppm TCLP lead. Verification samples will be collected from the treated soil to ensure that the a concentration of less than 5 ppm TCLP lead was achieved. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- The impacted area will be re-graded to achieve the desired slopes prior to placement of the engineered cover. An engineered cover consisting of 6 inches of asphalt will be placed on the impacted area.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover.

Cost Analysis

The estimated costs for the corrective measures alternatives presents estimates for capital costs and the annual operation

and maintenance costs. The present worth values for the various alternatives are as follows:

F-Pond

Alternative No.1, No action. **$0**

Alternative No.2, In-situ Treatment/Offsite Disposal.
$300,000 to $350,000

Alternative No.3, Solidification/Onsite Containment.
$200,000 to $250,000

North Ditch Staging Area

Alternative No.4, No action. **$0**

Alternative No.5, CAMU Treatment/Offsite Disposal.
$300,000 to $350,000

Alternative No.6, In-situ Treatment/Onsite containment.
$200,000 to $250,000

O&M/year. **$1,000 to $1,000**

EVALUATION OF THE PROPOSED REMEDY AND ALTERNATIVES

The selected remedies for cleaning up contaminated media at the KS&W facility as discussed above are Alternatives No.2 and No.5. The selection of Alternatives No.2 and No.5 is based on the following reasons: (a) the facility will not pose acute risks to humans and other ecological receptors when the remedy is complete; (b) the preponderance of wastes at the units in question will be treated and disposed offsite as non hazardous wastes; (c) the Peoria community and the neighboring communities do not use the groundwater as a drinking water source since drinking water supplies are already provided by the local governments in the area; (d) it is consistent with U.S. EPA's policy to encourage facility owners to redevelop and reuse land that has been impacted; (e) the alternatives do not require frequent or complex operation and maintenance; and (f) placement of deed restriction on the property deed will restrict the future use of the property to commercial and industrial.

The following discussion profiles the performance of the proposed remedy against technical, human health, environmental and institutional criteria.

1. **Technical.** Performance of the proposed remedy is evaluated through effectiveness and useful life. The remedy should be able to perform its intended function of containing, collecting and treating contaminated ground water over the required period of time. Reliability of the proposed remedy is evaluated through operation and maintenance (O&M) requirements and demonstrated reliability. The remedy should require infrequent O&M activities and have a minimal risk of failure. The viability of the proposed remedy is evaluated through its constructability and the time required for implementation and improvements. The remedy should be easily installed and provide beneficial results in a short period of time. Safety of the proposed remedy is evaluated for workers, nearby communities and the local environment. The chances for fire, explosion and exposure to hazardous constituents are considered.

   Technical criteria were compared on a relative basis between each of the corrective measure alternatives and their components. Alternatives No.2 and No.5 were found to meet all the technical criteria goals of performance, reliability, implementability and safety.

2. **Human Health.** The selected remedy should mitigate the short and long term potential for exposure to hazardous constituents and protect human health during and after its implementation. Compliance with existing U.S. EPA criteria, standards and guidelines is essential.

   The overall protection of human health is addressed most effectively at the KS&W facility by Alternatives No.2 and No.5. The toxicity and volume of the lead and iron-impacted soil/sediment will be reduced within the F-Pond due to the off-site disposal of these materials. The mobility of the lead in the characteristically hazardous soil/sediment, if present, will be reduced by treatment. The treatment process will reduce the leachability of the lead through chemical fixation/stabilization to concentrations below the toxicity characteristic concentrations. The offsite treatment component of the other alternatives would increase the risk of adverse offsite incidents.

Compliance with applicable ground water protection standards would be addressed by monitoring the existing onsite wells and installation of offsite monitoring wells located immediately outside of the facility boundary.

3. **Environmental.** The selected remedy should provide the greatest improvement to the environment over the shortest period of time. Adverse effects from the implementation of the remedy should be minimized. The overall protection of the environment is addressed most effectively at KS&W by Alternatives No.2 and No.5. Characteristically hazardous soils/sediments will be treated, as needed, and treated and impacted soils/sediments with lead and iron concentrations which exceed the remediation goals will be removed from the facility, eliminating the potential for future exposure to on-site workers or environmental receptors.

4. **Cost Estimate:** While not considered to be an evaluation criteria, costs were determined for each alternative. Costs could be considered when deciding between two or more corrective measure alternatives that were equally acceptable when evaluated for technical, human health, environmental and institutional criteria. Alternatives No.2 and No.5 will achieve the corrective action objectives in a cost effective manner and will provide for continued productive use of the property.

In summary, Alternatives No.2 and No.5 provide the best balance of tradeoffs among the alternatives with respect to the evaluation criteria. The proposed alternatives are protective of human health and the environment and will effectively control the source of contaminants into the ground water so as to reduce or eliminate further contamination. All applicable standards regarding ground water protection and onsite/offsite waste management would be addressed under this proposal and complied with during the corrective measures implementation process.

PUBLIC PARTICIPATION

U.S. EPA solicits input from the community on the cleanup methods proposed for each of the corrective measure alternatives. The public is also invited to provide comment on alternatives not addressed in this Statement of Basis (SB). U.S. EPA has set a public comment period from **August 1, 2005 to September 16, 2005** to encourage public participation in the selection process.

The Administrative Record for the KS&W facility is available at the following location:

Peoria Public Library
107 NE Monroe Street
Peoria, Illinois 61602
(309) 497-2000

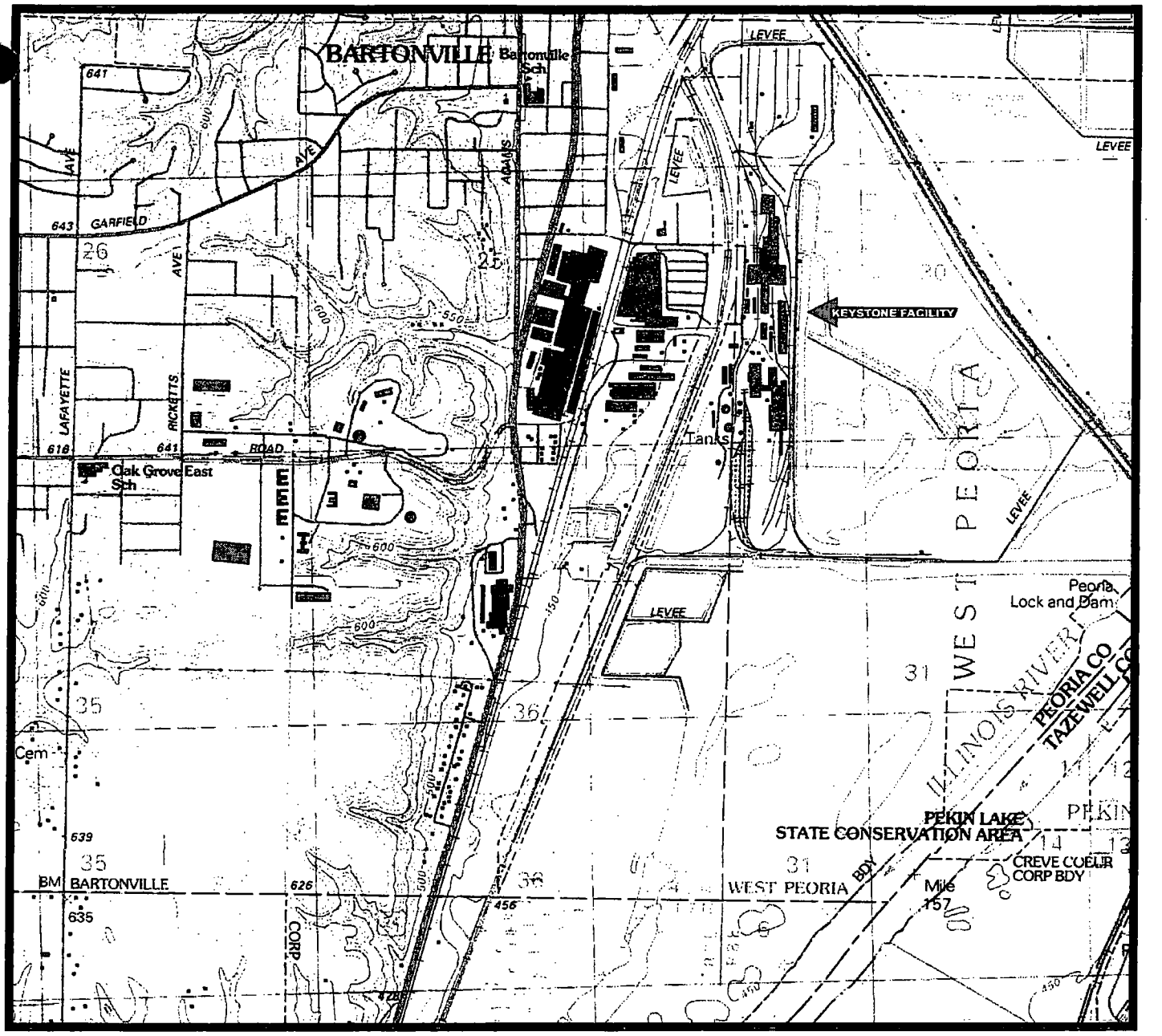
Alfa Park Public Library
3257 South Airport Road
Bartonville, Illinois 61607
(309) 697-3822

U.S. EPA, Region 5
Waste Management Division Records Center
77 West Jackson Boulevard, 7th Floor
Chicago, Illinois 60604
(312) 353-5821
Hours: Mon-Fri, 8:30 a.m. - 5:00 p.m.

After consideration of the comments received, U.S. EPA will select the remedy and document the selection in the Response to Comments (RTC). In addition, comments will be summarized and responses provided in the RTC. The RTC will be drafted at the conclusion of the public comment period and incorporated into the Administrative Record.

Written comments should be sent to:

Jonathan Adenuga
U.S. Environmental Protection Agency
77 West Jackson Boulevard, DRE-9J
Chicago, Illinois 60604



After U.S.G.S. 7.5 Minute Topographic Quadrangles, Peoria West and Pekin, Illinois, 1996, Contour Interval 10 feet

Scale

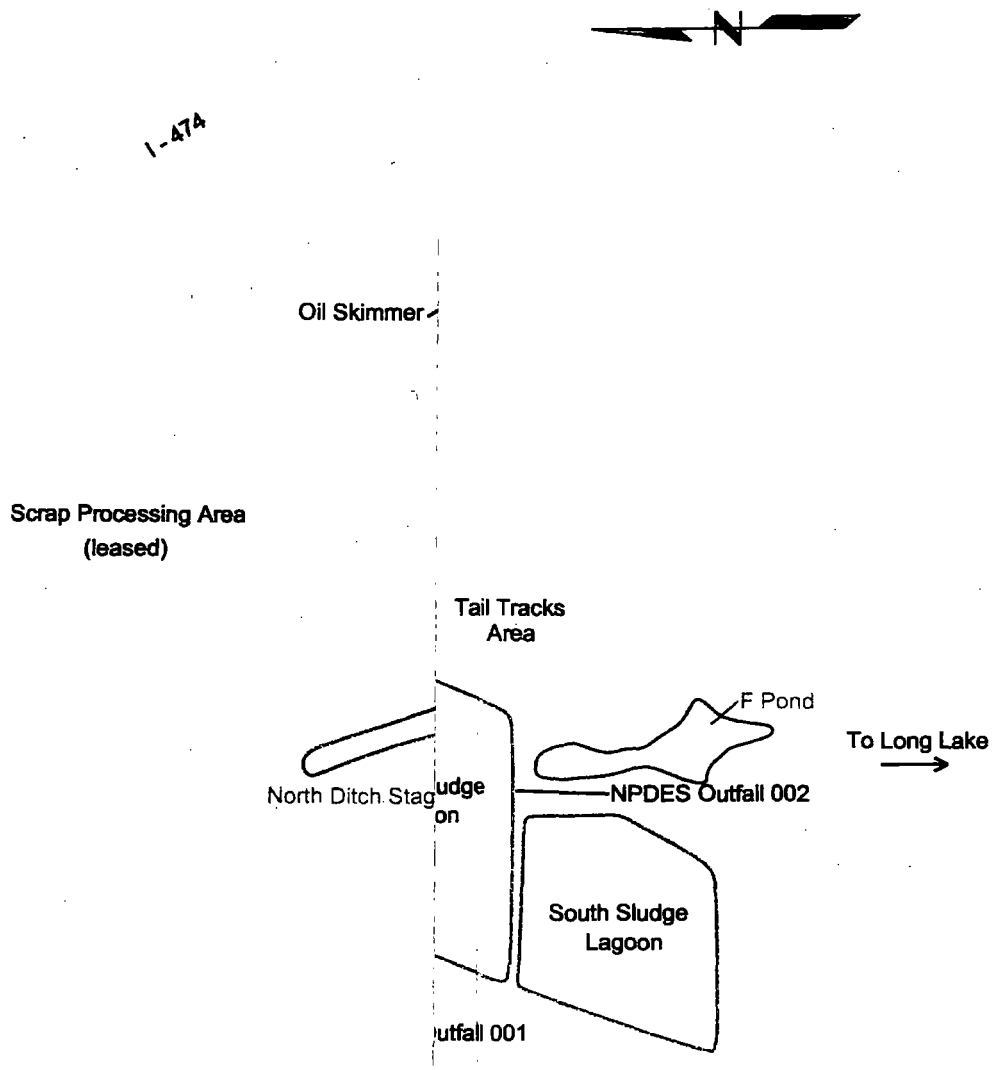
0 ½ 1 mile

N

Illinois

Quadrangle Location

FIGURE TITLE: Site Location Map		**CLIENT:** Keystone Steel & Wire Company	
DOCUMENT TITLE: Revised Final Corrective Measures Proposal		**LOCATION:** Peoria, Illinois	
ENTACT 4040 W. Royal Ln. Suite 136 Irving, Texas 75063 (972) 560-1323	**DATE:** 02/2005	**PREPARED BY:** DM	
	SCALE: As Shown	**CHECKED BY:** JE	
	PROJECT NO: D1154	**FIGURE NO:** 1	



ENTACT environmental services

4040 W. Royal Ln. • Suite 139 • Irving, TX 75063
(972) 650-1323 • Fax (972) 650-7444
Dallas • Houston • Chicago • Atlanta

NO.	DATE	REVISION	APP.

Scale: 1"=60' | Drawn By: ---- | Checked By: --- | Date: 11-24-04

KEYSTONE STEEL & WIRE
PEORIA, ILLINOIS

FIGURE 2

SITE LAYOUT MAP

BASE MAP PROVIDED BY RMT FROM REMEDIAL ACTION PLAN FOR SOUTH DITCH, SOUTH BC

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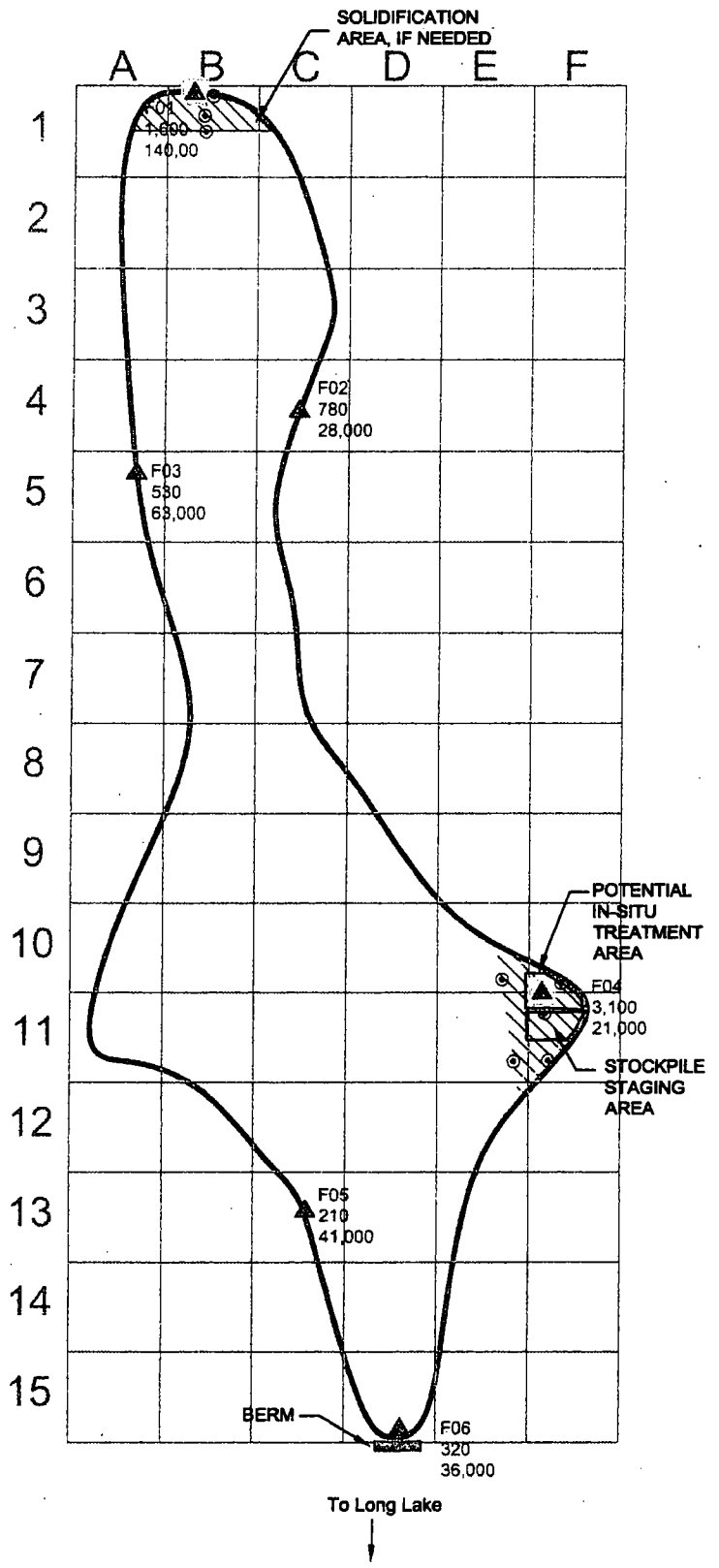
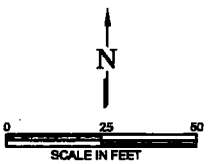


Notes:
The location of in-situ treatment, solidification and excavation areas will be dependent on the analytical results from the CMP sampling event to be conducted at the start of the corrective measures activities.

The in-situ treatment, solidification and excavation areas marked on this map are based on existing analytical data.



LEGEND

- Limits of the F-Pond
- Former Sample Points with Lead and Iron Concentrations (mg/kg)
- Former Sample Points Which Require Excavation (Concentration Exceeds PRG)
- 50x50 Grid
- Excavation Areas
- Post-Excavation Confirmation Sample Locations

Base map taken from "Environmental Indicators Assessment Report" dated January 2002.

F-POND
CORRECTIVE MEASURE ALTERNATIVE NO. 2
UNIT LAYOUT MAP

KEYSTONE STEEL & WIRE
PEORIA, ILLINOIS

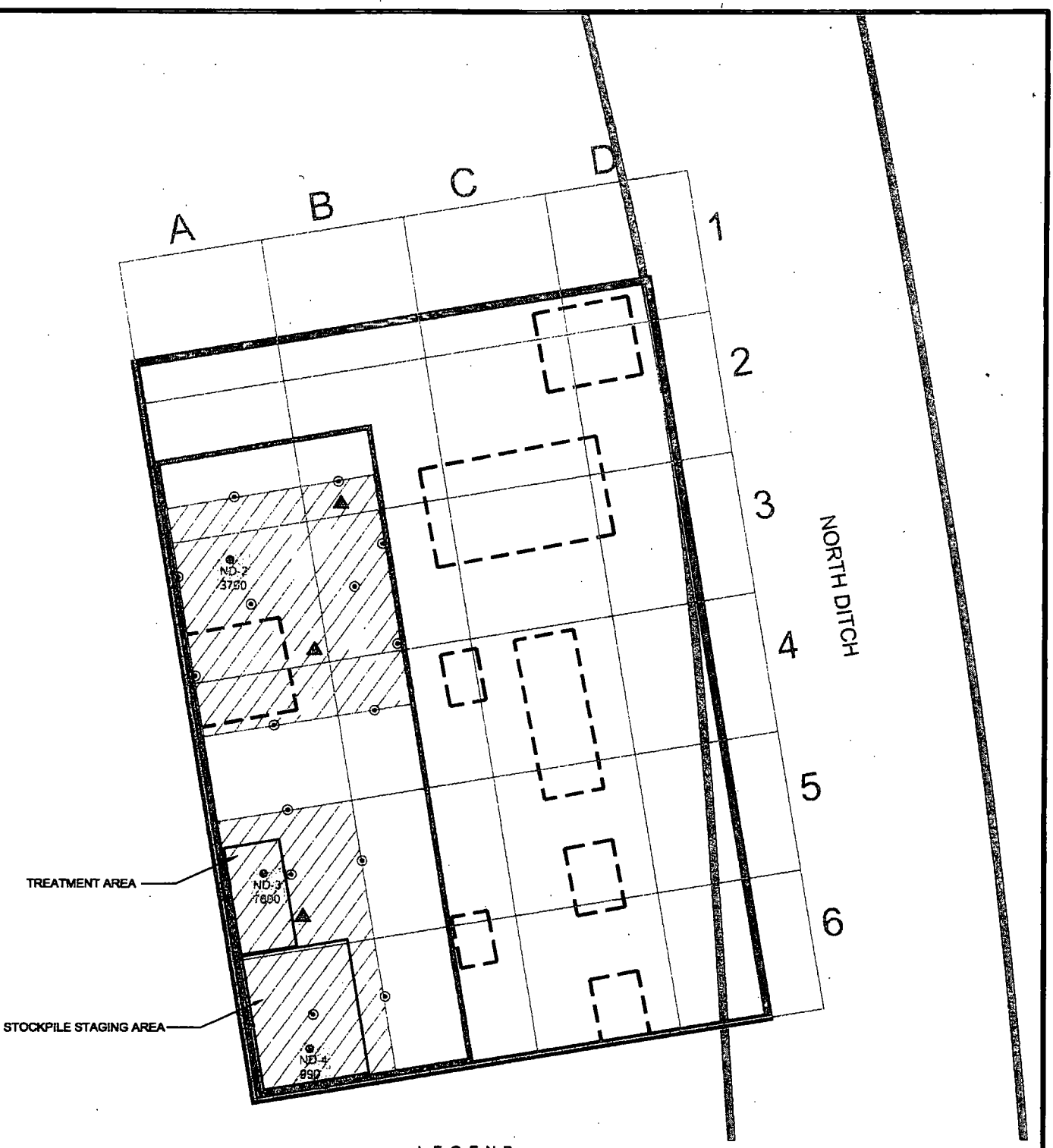
FIGURE 3

NO.	DATE	REVISION	APP.

Scale: 1"=50' Drawn By: — Checked By: — Date: 11-24-04

ENTACT environmental services

Projects\Keystone, Peoria,IL\Drawings\keystone-007 CMS.dwg, 4/12/2005 11:23:05 AM,



Notes:
The location of the treatment area will be dependent on the analytical results from the CMP sampling event to be conducted at the start of the corrective measures activities.

The excavation, treatment and backfill areas marked on this map are based on existing analytical data.

Base map taken from "Final Corrective Measures Proposal" dated January 2003.

LEGEND

- Limits of North Ditch Staging Area
- Locations of Former Treatment System Structures
- December 2002 Sample Locations and Lead Concentrations in mg/kg (Concentration Exceeds PRG)
- Former Sample Points (Concentration Exceeds PRG)
- Limits of Storage/Treatment CAMU
- Characterization Sample Locations
- 50 x 50 Foot Grid
- Excavation and Backfill Areas
- Post-excavation Confirmation Sample Locations

N

0 25 50
SCALE IN FEET

NORTH DITCH STAGING AREA
CORRECTIVE MEASURE ALTERNATIVE NO. 2
UNIT LAYOUT MAP

KEYSTONE STEEL & WIRE
PEORIA, ILLINOIS

FIGURE 5

NO.	DATE	REVISION	APP.

Scale: 1"=50' Drawn By: — Checked By: — Date: 11-24-04

ENTACT

Keystone Steel & Wire

January 12, 2005

CERTIFIED MAIL # 7003 0500 0001 6634 2823
RETURN RECEIPT REQUESTED

Mr. Jonathan Adenuga
Enforcement and Compliance Assurance
Waste, Pesticides, and Toxics Division
U.S. Environmental Protection Agency, Region 5 (DE-9J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Re: Administrative Order on Consent
Keystone Steel & Wire Company
EPA ID No: ILD 000 714 881

Dear Mr. Adenuga:

While maintaining the position and reserving all rights and defenses detailed in the December 17, 2004 letter to you from Mr. Andrew Running, Keystone & Steel Wire Company (Keystone) is requesting an extension, to February 15, 2005, for submittal of the Final Corrective Measures Proposal for remediating the F-Pond and other RCRA units at Keystone's Peoria, Illinois facility.

As discussed in detail during our meeting on January 4, 2005, this extension is necessary to present, and gain approval for, modifications to the closure plan with the Illinois Environmental Protection Agency (IEPA) and to then coordinate those activities with the requirements specified in the USEPA Administrative Order on Consent. Specifically, Keystone wants to coordinate the remediation of the units addressed as part of USEPA Corrective Action with the units and areas to be addressed by the IEPA Closure Activities. Keystone believes coordination of the USEPA Corrective Action activities with the IEPA Closure Activities would facilitate a more cost effective and practical technical approach. Keystone's goal is to have the remediation of the F-Pond and the closure of the impoundments and related areas completed by the end of 2005.

If you have any questions, please do not hesitate to contact me at (309) 697-7538 or Thad Slaughter of ENTACT at (972) 580-1323.

Sincerely,
Keystone Steel & Wire Company

Russ R. Perry, P.G.
Manager, Energy & Environmental Engineering

cc: Terry Casey, CONTRAN Corporation
George Hamper, USEPA
Mark Hollingsworth, Keystone Consolidated Industries
Jim Moore, IEPA
Andrew Running, Kirkland & Ellis
Thad Slaughter, ENTACT

STATEMENT OF BASIS

for

Keystone Steel and Wire Company
EPA ID NO. ILD 000 714 881
Peoria, Illinois

Keystone Steel and Wire Company
Peoria, Illinois

INTRODUCTION

This Statement of Basis (SB) for Keystone Steel and Wire Company (KS&W) explains the proposed remedy for the collection, treatment and removal of hazardous waste from an onsite pond (F-Pond) and the North Ditch Staging Area at the facility in Peoria, Illinois. In addition, the SB includes summaries of all corrective measure alternatives analyzed by KS&W. U.S. EPA will select a final remedy for the facility only after the public comment period has ended and the information provided by the public during this period has been reviewed and substantive comments considered.

The U.S. EPA is issuing this SB as part of its public participation responsibilities under the Resource Conservation and Recovery Act (RCRA). The document summarizes information that can be found in greater detail in the February 2001 Current Conditions Report and the January 2002 Environmental Indicators (EI) Determination Report and other pertinent documents contained in the Administrative Record for this facility. U.S. EPA encourages the public to review these documents in order to gain a more comprehensive understanding of the facility and the RCRA activities that have been conducted. The public can be involved in the remedy selection process by reviewing the documents contained in the Administrative Record.

U.S. EPA may modify the proposed remedy or select another remedy based on new information or public comments. Therefore, the public is encouraged to review and comment on **all** alternatives.

PROPOSED REMEDY

The U.S. EPA is proposing the following remedy to address all contamination at the **F-Pond:**

1) Dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments; 3) in-situ treatment of characteristically hazardous soils/sediments, if present, to render the soils/sediments non-hazardous, when generated; 4) excavation of the treated and impacted soils/sediments to achieve the remediation goals; 5) off-site disposal of the excavated soils/sediments as non-hazardous waste at a Subtitle D disposal facility; 6) deed restriction on the F-Pond to limit future use of the unit to commercial/industrial

purposes; and 7) implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater.

The U.S. EPA is proposing the following remedy to address all contamination at the **North Ditch Staging Area:**

1) Identification of characteristically hazardous soils; 2) excavation and treatment of characteristically hazardous soils, if present, within a designated storage/treatment Corrective Action Management Unit (CAMU) to render the soil non-hazardous and meet the applicable land disposal restrictions (LDR); 3) excavation of impacted soils to achieve the remediation goals; 4) off-site disposal of the excavated and treated soils as non-hazardous waste at a Subtitle D disposal facility; 5) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes; and 6) implementation of a groundwater monitoring system to demonstrate no impact to the underlying groundwater. The components of this alternative are further described below.

The U.S. EPA considers corrective action for groundwater to be complete when all releases to groundwater, including releases from Solid Waste Management Units (SWMUs), have been remediated. Groundwater cleanup objectives include three components: groundwater cleanup levels, point of compliance, and remediation time frames. Point of compliance for corrective action should be throughout the area where groundwater is contaminated above cleanup levels, or, when waste is left in place, at and beyond the boundary of the waste. U.S. EPA refers to this point of compliance as the "throughout-the plume/unit boundary" point of compliance. Therefore, for the current groundwater contamination, U.S. EPA proposes that KS&W continue to operate the ongoing pump and treat system to meet the concentration levels set by the IEPA in the Groundwater management zone (GMZ). For the F-Pond and the North Ditch Staging Area, U.S. EPA is proposing that KS&W also implement a one-time groundwater sampling and analysis program to demonstrate that there are no impacts to groundwater from the F-Pond and North Ditch Staging Area. All hazardous constituents reported in these two units will be analyzed in all groundwater samples collected from the monitoring wells to be installed at these units. A more detailed discussion of the proposed remedy is included below.

The U.S. EPA is also proposing that KS&W must demonstrate that adequate funds will be available to complete the construction as well as the operation and maintenance of the proposed remedy. KS&W must provide this financial assurance within 90 days after U.S. EPA selects the remedy and issues its *Final Decision and*

Response to Comments. Any of the following financial mechanisms may be used to make this demonstration: financial trusts, surety bonds, letters of credit, insurance, or qualification as a self-insurer by means of a financial test. KS&W may request that the amount of the financial assurance be reduced substantially after successfully completing the construction, and again from time to time during the operation and maintenance phase of the remedy.

FACILITY BACKGROUND

The site is located at 7000 South Adams Street, Peoria, Illinois. The facility is just east of U.S. Route 24, south the intersection of Routes 24 and 474, and about one mile west of the Illinois River. The facility manufactures iron and steel including semi-finished and finished wire products. The facility occupies about 1,410 acres and has operated since around 1900.

Soil and groundwater in several areas at the facility are contaminated at levels above appropriately protective risk-based standards. The risk based standards used for this determination are the U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) or the Illinois risk-based remediation objectives. Most of these contaminated areas at the facility are units undergoing closure in compliance with a 1993 Consent Order issued by the Illinois Environmental Protection Agency (IEPA) to KS&W. Corrective action and closure of a majority of these areas has been done under the supervision of the IEPA. These areas include the following: a) South Ditch, b) South Borrow Area Waste Pile, c) Lower South Ditch, d) Soil Stained Area, e) North Ditch, f) Surface Drainage Ditch Area, g), h) Mid Mill Ditch, and i) North and South Dredged Pile.

In 1994, a (GMZ) was approved by IEPA under the 1993 Consent Order to control and begin remediation of a plume of contaminated groundwater that extends under most of the Mid Mill portion of the facility. The groundwater plume is controlled and remediated via a groundwater pump and treat system consisting of four purge wells and an air stripper tower. The plume contains 1,4-dioxane, 1,1-dichcloroethane, 1,1-dichloroethene, trans-1,2-DCE, cis-1,2-DCE, terachloroethene, trichloroethylene, trichloroethene and vinyl chloride. Total volatiles concentrations throughout the GMZ have already been reduced to below one part per million and the action of the pump and treat system continues to reduce the area and extent of the plume.

In December 19, 2000, the U.S. EPA issued an Administrative Order on Consent (AOC) to KS&W compelling KS&W to identify the nature

and extent of any releases of hazardous waste or hazardous constituents from five Solid Waste Management Units (SWMUs) at the facility: a) the Sheen Pond; b) the F-pond; c) the Tail Track Landfill; d) the pond east of the Tail Track Landfill; and e) the Oil Skimming Basin. KS&W was required to submit an Environmental Indicators (EI) report demonstrating that KS&W has contained all current human exposure to contamination and has stabilized the migration of contaminated groundwater at or from the facility including the SWMUs mentioned above. The AOC also required that KS&W submit to U.S. EPA for review final corrective measure proposals for the five SWMUs by January 2003. The AOC requires KS&W to complete all final correctives measures within a reasonable period to protect human health and the environment.

CORRECTIVE MEASURES IMPLEMENTED

KS&W has continued making progress towards the closure of several units since the end of 2000. KS&W has demonstrated clean closure for the following units at the facility: a) the North Ditch; b) the Mid Mill Ditch; c) the Surface Drainage Ditch; and d) the North and South Dredged Pile. To address the remaining areas subject to closure under the IEPA Order, KS&W continues to investigate and submit closure and remedial proposals to the IEPA. Remedial action plans for the South Ditch, South Borrow Area and the Lower South Ditch were approved by the IEPA in November 2002. The current deadline for completing the remedial actions at these three Units is December 31, 2005.

Based on on the January 29, 2002 EI Assessment Report, KS&W has also continued the operation of the groundwater purge wells and the air stripper tower to control and remediate the plume of contaminated groundwater at the facility. Operations have resulted in a significant reduction in the GMZ area and significant reductions in overall containment concentrations throughout the plume. Chlorinated compounds such as TCE, 1,1,1,-TCA, vinyl chloride, 1,2-DCE, trans-1,2 have been detected in deep aquifer at the facility in varying concentrations. For example, 1,1,1-trichloroethane concentrations range from 25 ppb to 205 ppb, well above the recommended PRG of 5.4 ppb; trichloroethylene concentrations range from 65 ppb to 530 ppb, well above the PRG of 1.6 ppb. As of November of 2001, monitoring events indicate that the pump and treat method of remediation currently ongoing at the site has reduced the concentrations of total volatile concentrations throughout the plume to below 1 ppm. The plume circumference has been drastically reduced and contained within the facility boundary. No offsite migration of contaminated groundwater has ever been reported.

Also based on the EI Assessment Report, KS&W investigated four other areas originally not identified in the December 2000 AOC: the North Ditch Staging Area, the East Sludge Pond and the East West Pond; the Slag Processing Area; and the North and South Sludge Lagoons. Excluding the North Ditch Staging Area, the U.S. EPA concluded from these additional investigations that no further actions are warranted in the North and South Sludge Lagoons and the East Sludge Pond and the East West Pond.

SUMMARY OF FACILITY RISKS

Based on the results of the 2001 surface water samples collected from the F-Pond, iron and manganese were detected at 29 ppb and 47 ppb above the federal drinking water standard of 15ppb. TCE was also detected in one sample at 2 ppb. In the sediment samples collected from F-Pond, lead and iron were detected at concentrations above the industrial PRGs. Iron concentrations in the sediments range from 21,000 mg/kg to 140,000 mg/kg and lead concentrations range from 210mg/kg to 3,100 mg/kg. The results of the 1996 and 2002 sampling events at the North Ditch Staging Area also confirmed the presence of elevated lead in soils. Based on TCLP results, concentrations of lead in soils range from non-detect to 22 mg/kg and total concentrations for lead range from 380 mg/kg to 12,000 mg/kg. The levels of lead and iron contamination are above appropriately protective risk-based standards. The risk based standards used for this determination are the U.S. EPA Region 9 Preliminary Remediation Goals (PRGs) or the Illinois risk-based remediation Objectives.

The goals of the selected remedy are to eliminate significant exposures that pose threats to human health and the environment, to clean up contaminated soils to levels consistent with current land use, to restore ground water to its maximum beneficial use, and to eliminate risks to human health by meeting the applicable health-based ground water protection standards. The proposed Remedy selection was based on the assumption that future use of the site will be industrial/commercial, consistent with the current property use. Each of the constituents detected at the site was retained as Potential Constituents of Concern (PCOCs) in groundwater, sediments and surface water. Since the F-Pond may be designated as a wetland, it is assumed that the excavated portion of the F-Pond will not be backfilled with clean fill, but may be restored in accordance with the requirements of Nationwide Permit 38 as approved by the U.S. Army Corps of Engineers.

The site-specific corrective action objectives utilize an exposure prevention approach which either allows removal of waste

materials, activity restrictions or construction of engineered controls to prevent contact.

SUMMARY OF CORRECTIVE MEASURE ALTERNATIVES

The reasonable alternatives for addressing contamination at the KS&W facility are presented below.

Soil and Structures:
Access Restrictions
Deed Restrictions
In-situ Treatment/Off-site Disposal

Groundwater:
Groundwater Pump and Treat System
Alternate Water Supply
Groundwater Monitoring

All of the above alternatives were evaluated during the Corrective Measures Study. Based on the evaluation of these alternatives, the Corrective Measures Alternatives described below were proposed by KS&W for addressing contamination at the facility.

KS&W'S PROPOSED CORRECTIVE MEASURES ALTERNATIVES FOR ADDRESSING CONTAMINATION AT THE FACILITY

Several corrective measures alternatives were considered for the F-Pond and the North Ditch Staging Area during the development of this corrective measures study. The alternatives were developed based on RCRA's threshold screening criteria. Those criteria are as follows:

- Protecting human health and the environment;
- Attaining the applicable media cleanup standards; and
- Controlling the sources of the releases.

The alternatives considered for the F-Pond and North Ditch Staging Area that meet these criteria are described in the following sections. These proposed corrective measures are intended to address risks to human health and the environment under commercial/industrial land use scenarios.

F-Pond

Keystone has considered the following options for the remediation of lead and iron-impacted soils/sediments at the F-Pond.

Alternative No. 1: No Action

Alternative No. 1 consists of no action. Under this alternative, no remedial action or institutional controls will be implemented.

Alternative No. 2: In-situ Treatment/Off-site Disposal

Alternative No. 2 consists of the: 1) dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments; 3) in-situ treatment of characteristically hazardous soils/sediments, if present, to render the soils/sediments non-hazardous, when generated; 4) excavation of the treated and impacted soils/sediments to achieve the remediation goals; 5) off-site disposal of the excavated soils/sediments as non-hazardous waste at a Subtitle D disposal facility; and 6) deed restriction of the F-Pond to limit future use of the unit to commercial/industrial purposes. The components of this alternative are further described as follows:

- Surface water present in the F-Pond will be sampled to determine the nature and concentration of the contaminants of concern identified during previous investigations, i.e. lead, iron, manganese, and trichloroethylene (TCE). Based on these results, the surface water will be transferred directly to the facility's wastewater treatment plant (WWTP) for treatment, if needed, and discharge under the facility's industrial discharge permit. This discharge will be conducted by KS&W in compliance with the limits established in the NPDES industrial discharge permit.

- Samples will be collected from the F-Pond soil/sediment for laboratory analysis to determine if any of the soil/sediment exhibits the toxicity characteristic for lead (> 5 mg/l). A 50-foot by 50-foot coordinate grid system will be used to guide the collection of these characterization samples, i.e., composite sample will be collected from each 50-foot grid. The samples will be submitted for analysis of TCLP lead. Additional samples may be collected using the 50-foot grid system for delineation purposes, i.e. one composite sample per 50-foot grid. These samples will be submitted for analysis of total lead and total iron.

- Based on these results, soil/sediment that is determined to exhibit the toxicity characteristic for lead will be treated

in-situ within the footprint of the F-Pond using the appropriate additive and dosage rate required to render the soil/sediment non-hazardous, when generated. Upon the completion of in-situ treatment activities, composite samples will be collected to verify that the treatment criteria were achieved, i.e. <5 mg/l TCLP lead. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils/sediments with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 mg/kg total iron, will be dried or solidified, as needed, to ensure that free liquids are not present in the material for off-site disposal purposes.

- The treated soil/sediment and impacted soil/sediment with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 mg/kg total iron, will then be excavated to the appropriate depth, as guided by the use of an x-ray fluorescence (XRF) field screening unit. The excavated soil/sediment will be temporarily stockpiled within the limits of the F-Pond for consolidation purposes prior to off-site disposal as non-hazardous waste at a Subtitle D disposal facility.

- When XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. The post excavation confirmation samples will consist of composite samples collected from the bottom and sidewalls of the excavation using the established 50-foot by 50-foot coordinate grid system, i.e., composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead and iron. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil/sediment will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- The excavated portions of the F-Pond will be restored pursuant to the requirements of the Nationwide Permit 38 approved by the U.S. ACOE.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial

purposes. Refer to Figure 3 for a summary of the remedial activities associated with this corrective measure alternative for the F-Pond.

Alternative No. 3: Solidification/On-site Consolidation and Containment.

Alternative No. 3 consists of 1) dewatering of the F-Pond; 2) identification of characteristically hazardous soils/sediments, if generated; 3) in-situ treatment of soils/sediments that may exhibit the toxicity characteristic for lead, if generated, to less than 5 parts per million (ppm); 4) solidification of the soil/sediments for stability purposes; 5) consolidation of the treated and impacted soils/sediments to one portion of the F-Pond; 6) placement of an engineered cover over the consolidated soils/sediments with concentrations of the constituents of concern that exceed the remediation goals; and 7) deed restriction of the F-Pond to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover. The components of this alternative are further described as follows:

- Surface water present in the F-Pond will be sampled to determine the nature and concentration of the contaminants of concern identified during previous investigations, i.e. lead, iron, manganese, and TCE. Based on these results, the surface water will be transferred directly to the facility's WWTP for treatment, if needed, and discharge under the facility's industrial discharge permit. This discharge will be conducted by KS&W in compliance with the limits established in the NPDES industrial discharge permit.

- Samples will then be collected from the F-Pond soil/sediment for laboratory analysis to determine if the soil/sediment exhibits the toxicity characteristic for lead (> 5 mg/l TCLP). A 50-foot by 50-foot coordinate grid system will be used to guide the collection of these characterization samples, i.e. one composite sample will be collected from each 50-foot grid. The samples will be submitted for analysis of TCLP lead. Additional samples may be collected using the 50-foot grid system for delineation purposes, i.e. one composite sample per 50-foot grid. These samples will be submitted for analysis of total lead and total iron.

- Based on these results, soil/sediment that is determined to exhibit the toxicity characteristic for lead, if generated,

will be treated in-situ within the footprint of the F-Pond using the appropriate additive and dosage rate required to achieve a concentration of less than 5 ppm TCLP lead. Upon the completion of in-situ treatment activities, composite samples will be collected to verify that the treatment criteria were achieved, i.e. <5 mg/l TCLP lead. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils/sediments with concentrations of the constituents of concern that exceed the remediation goals, i.e. 800 mg/kg total lead and 100,000 total iron, will be solidified to ensure that the material can support the weight of the engineered cover.

- The treated and solidified soils/sediments will be excavated to the appropriate depth required to achieve the remediation goals, as guided by the use of an XRF unit, for consolidation in one portion of the F-Pond.

- When the XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. The post excavation confirmation samples will consist of composite samples collected from the bottom and sidewalls of the excavated portions of the F-Pond using the established 50-foot by 50-foot coordinate grid system, i.e. one composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead and iron. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil/sediment will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- The excavated portions of the F-Pond will be restored pursuant to the requirements of the Nationwide Permit 38 approved by the U.S. ACOE.

- A groundwater monitoring program will be developed to confirm that there is no migration of the contaminants of concern.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover.

North Ditch Staging Area

Keystone has considered the following options for the remediation of lead-impacted soils at the North Ditch Staging Area:

Alternative No. 4: No Action

Alternative No. 4 consists of no action. Under this alternative, no remedial action or institutional controls will be implemented.

Alternative No. 5: CAMU Treatment/Off-site Disposal

Alternative No. 5 consists of the: 1) identification of characteristically hazardous soils; 2) excavation and treatment of characteristically hazardous soils, if present, within a designated storage/treatment corrective action management unit (CAMU) to render the soil non-hazardous and meet the applicable land disposal restrictions (LDR); 3) excavation of impacted soils to achieve the remediation goals; 4) off-site disposal of the excavated and treated soils as non-hazardous waste at a Subtitle D disposal facility; and 5) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes. The components of this alternative are further described as follows:

- Samples will be collected for laboratory analysis from the locations in the North Ditch Staging Area where samples were previously collected in December 2002 to determine if the soil exhibits the toxicity characteristic for lead (>5 mg/l TCLP).

- Based on these results, soil that is determined to exhibit the toxicity characteristic for lead will be excavated and temporarily stockpiled within the storage/treatment CAMU. (The storage/treatment CAMU will be located within the limits of the North Ditch Staging Area). The temporary soil stockpiles will then be treated using the appropriate additive and dosage rate required to render the soil non-hazardous and meet the applicable LDRs. Verification samples will be collected from the treated soil stockpiles at the frequency required to meet the receiving landfill's requirements to verify that the alternative LDR treatment standards for contaminated soil, pursuant to 40 CFR § 268.49, have been met. If the treatment criteria were not achieved, then in-situ treatment will continue until the

treatment criteria are achieved and confirmed by laboratory analysis.

- Impacted soils with lead concentrations that exceed the remediation goal of 800 mg/kg will be excavated to the appropriate depth (estimated to be approximately 2 feet below ground surface), as guided by the use of an XRF field screening unit. The excavated soil will be temporarily stockpiled within the limits of the North Ditch Staging Area pending off-site disposal as non-hazardous waste at a Subtitle D disposal facility.

- When XRF field screening indicates that excavation is complete, post-excavation confirmation samples will be collected to confirm that the remediation goals have been achieved. Post-excavation confirmation samples will be collected from the excavation bottom and sidewalls using a 50-foot by 50-foot coordinate grid system, i.e. one composite sample per grid bottom and one composite sample per grid sidewall, for laboratory analysis of total lead. If the laboratory results indicate that the remediation goals have not been achieved, then excavation of the impacted soil will continue until the remediation goals have been achieved and confirmed by laboratory analysis.

- Clean fill from an on-site source located to the south of the Temporary Container Storage Area will be transferred to the North Ditch Staging Area for use as backfill. Samples will be collected from the fill material at a frequency of one sample per source and will be submitted for analysis of total RCRA 8 metals and total petroleum hydrocarbons (TPH) to determine if the fill is usable. The total RCRA 8 metals results will be compared to the Illinois TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties and the TPH concentration will not exceed 100 ppm. If the TPH concentration exceeds 100 ppm, then the sample will be analyzed for semi-volatile organic compounds (SVOC) and the results will be compared to the Illinois TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties. If the results are less than the applicable TACO Tier I Soil Remediation Objectives for Industrial/Commercial Properties, then the backfill source will be deemed clean for use. The fill will be placed in the excavation in specified lifts and compacted to original grade.

- A deed restriction will be required under this alternative to limit future use of the unit to

commercial/industrial purposes.

Alternative No. 6: In-situ Treatment/On-site Containment

Alternative No. 6 consists of the: 1) identification of characteristically hazardous soil; 2) in-situ treatment of soils that exhibit the toxicity characteristic for lead, if generated, to less than 5 ppm; 3) placement of an engineered cover over all soils with concentrations of the constituent of concern that exceed the remediation goals; and 4) deed restriction on the North Ditch Staging Area to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover. The components of this alternative are further described as follows:

- Samples will be collected for laboratory analysis from the locations in the North Ditch Staging Area where samples were previously collected in December 2002 to determine if the soil exhibits the toxicity characteristic for lead (>5 mg/l TCLP).

- Based on these results, soil that is determined to exhibit the toxicity characteristic for lead will be treated in-situ within the footprint of the North Ditch Staging Area using the appropriate additive and dosage rate required to achieve a concentration of less than 5 ppm TCLP lead. Verification samples will be collected from the treated soil to ensure that the a concentration of less than 5 ppm TCLP lead was achieved. If the treatment criteria were not achieved, then in-situ treatment will continue until the treatment criteria are achieved and confirmed by laboratory analysis.

- The impacted area will be re-graded to achieve the desired slopes prior to placement of the engineered cover. An engineered cover consisting of 6 inches of asphalt will be placed on the impacted area.

- A deed restriction will be required under this alternative to limit future use of the unit to commercial/industrial purposes and to maintain the integrity of the engineered cover.

Cost Analysis

The estimated costs for the corrective measures alternatives presents estimates for capital costs and the annual operation

and maintenance costs. The present worth values for the various alternatives are as follows:

F-Pond

Alternative No.1, No action. **$0**

Alternative No.2, In-situ Treatment/Offsite Disposal.
$300,000 to $350,000

Alternative No.3, Solidification/Onsite Containment.
$200,000 to $250,000

North Ditch Staging Area

Alternative No.4, No action. **$0**

Alternative No.5, CAMU Treatment/Offsite Disposal.
$300,000 to $350,000

Alternative No.6, In-situ Treatment/Onsite containment.
$200,000 to $250,000

O&M/year. **$1,000 to $1,000**

EVALUATION OF THE PROPOSED REMEDY AND ALTERNATIVES

The selected remedies for cleaning up contaminated media at the KS&W facility as discussed above are Alternatives No.2 and No.5. The selection of Alternatives No.2 and No.5 is based on the following reasons: (a) the facility will not pose acute risks to humans and other ecological receptors when the remedy is complete; (b) the preponderance of wastes at the units in question will be treated and disposed offsite as non hazardous wastes; (c) the Peoria community and the neighboring communities do not use the groundwater as a drinking water source since drinking water supplies are already provided by the local governments in the area; (d) it is consistent with U.S. EPA's policy to encourage facility owners to redevelop and reuse land that has been impacted; (e) the alternatives do not require frequent or complex operation and maintenance; and (f) placement of deed restriction on the property deed will restrict the future use of the property to commercial and industrial.

The following discussion profiles the performance of the proposed remedy against technical, human health, environmental and institutional criteria.

1. **Technical.** Performance of the proposed remedy is evaluated through effectiveness and useful life. The remedy should be able to perform its intended function of containing, collecting and treating contaminated ground water over the required period of time. Reliability of the proposed remedy is evaluated through operation and maintenance (O&M) requirements and demonstrated reliability. The remedy should require infrequent O&M activities and have a minimal risk of failure. The viability of the proposed remedy is evaluated through its constructability and the time required for implementation and improvements. The remedy should be easily installed and provide beneficial results in a short period of time. Safety of the proposed remedy is evaluated for workers, nearby communities and the local environment. The chances for fire, explosion and exposure to hazardous constituents are considered.

   Technical criteria were compared on a relative basis between each of the corrective measure alternatives and their components. Alternatives No.2 and No.5 were found to meet all the technical criteria goals of performance, reliability, implementability and safety.

2. **Human Health.** The selected remedy should mitigate the short and long term potential for exposure to hazardous constituents and protect human health during and after its implementation. Compliance with existing U.S. EPA criteria, standards and guidelines is essential.

   The overall protection of human health is addressed most effectively at the KS&W facility by Alternatives No.2 and No.5. The toxicity and volume of the lead and iron-impacted soil/sediment will be reduced within the F-Pond due to the off-site disposal of these materials. The mobility of the lead in the characteristically hazardous soil/sediment, if present, will be reduced by treatment. The treatment process will reduce the leachability of the lead through chemical fixation/stabilization to concentrations below the toxicity characteristic concentrations. The offsite treatment component of the other alternatives would increase the risk of adverse offsite incidents.

Compliance with applicable ground water protection standards would be addressed by monitoring the existing onsite wells and installation of offsite monitoring wells located immediately outside of the facility boundary.

3. **Environmental.** The selected remedy should provide the greatest improvement to the environment over the shortest period of time. Adverse effects from the implementation of the remedy should be minimized. The overall protection of the environment is addressed most effectively at KS&W by Alternatives No.2 and No.5. Characteristically hazardous soils/sediments will be treated, as needed, and treated and impacted soils/sediments with lead and iron concentrations which exceed the remediation goals will be removed from the facility, eliminating the potential for future exposure to on-site workers or environmental receptors.

4. **Cost Estimate:** While not considered to be an evaluation criteria, costs were determined for each alternative. Costs could be considered when deciding between two or more corrective measure alternatives that were equally acceptable when evaluated for technical, human health, environmental and institutional criteria. Alternatives No.2 and No.5 will achieve the corrective action objectives in a cost effective manner and will provide for continued productive use of the property.

In summary, Alternatives No.2 and No.5 provide the best balance of tradeoffs among the alternatives with respect to the evaluation criteria. The proposed alternatives are protective of human health and the environment and will effectively control the source of contaminants into the ground water so as to reduce or eliminate further contamination. All applicable standards regarding ground water protection and onsite/offsite waste management would be addressed under this proposal and complied with during the corrective measures implementation process.

PUBLIC PARTICIPATION

U.S. EPA solicits input from the community on the cleanup methods proposed for each of the corrective measure alternatives. The public is also invited to provide comment on alternatives not addressed in this Statement of Basis (SB). U.S. EPA has set a public comment period from **August 1, 2005 to September 16, 2005** to encourage public participation in the selection process.

The Administrative Record for the KS&W facility is available at the following location:

Peoria Public Library
107 NE Monroe Street
Peoria, Illinois 61602
(309) 497-2000

Alpha Park Public Library
3527 South Airport Road
Bartonville, Illinois 61607
(309) 697-3822

U.S. EPA, Region 5
Waste Management Division Records Center
77 West Jackson Boulevard, 7th Floor
Chicago, Illinois 60604
(312) 353-5821
Hours: Mon-Fri, 8:30 a.m. - 5:00 p.m.

After consideration of the comments received, U.S. EPA will select the remedy and document the selection in the Response to Comments (RTC). In addition, comments will be summarized and responses provided in the RTC. The RTC will be drafted at the conclusion of the public comment period and incorporated into the Administrative Record.

Written comments should be sent to:

Jonathan Adenuga
U.S. Environmental Protection Agency
77 West Jackson Boulevard, DRE-9J
Chicago, Illinois 60604

11/14/00
R. Perry
Keystone

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	ADMINISTRATIVE ORDER ON CONSENT
Keystone Consolidated Industries, Inc., 7000 S.W. Adams Street Peoria, Illinois 61641-0002	U.S. EPA Docket No: R8H-5-01-001
EPA ID#: ILD 000 714 881	Proceeding under Section 3008(h) of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6928(h).
RESPONDENT	

I. JURISDICTION

1. The Chief of the Enforcement and Compliance Assurance Branch, in the Waste, Pesticides and Toxics Division of U.S. EPA Region 5, issues this order under subsections 3008(a) and (h) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6928(a), (h). The Chief possesses this authority under a series of delegations originating with the Administrator of U.S. EPA.

2. The Chief issues this Order to Keystone Consolidated Industries, Inc. ("Keystone"), a Delaware corporation, who owns and operates an iron and steel products manufacturing facility located at 7000 S.W. Adams Street, Peoria, Illinois. Keystone's Peoria facility is adjacent to the west bank of the Illinois River.

3. Keystone acknowledges U.S. EPA's authority to issue this Order and consents to its terms. Keystone agrees not to contest any action by U.S. EPA to compel compliance with this order or to impose sanctions for violations of the Order.

II. DEFINITIONS

4. This Order incorporates the definitions found in the RCRA statute, 42 U.S.C. §§ 6901-6992k, and regulations promulgated under RCRA unless otherwise specified.

III. PARTIES BOUND

5. This Order applies to U.S. EPA and Keystone. The Order further applies to persons acting on behalf of Keystone or to a corporate successor to Keystone. Keystone remains liable for any failure to carry out all activities required by this Order, regardless of Keystone's use of employees, agents, contractors, or consultants to perform its obligations.

6. Should Keystone transfer any property interest in its Peoria facility, Keystone's responsibilities under this Order will remain unaffected. In the event of a transfer of a whole or partial interest in its Peoria facility, Keystone will furnish the recipient of the property interest with notice of this Order. Keystone must also furnish the federal project manager with notice within five days of the transfer. In the notice of transfer to the federal project manager, Keystone will certify that the transfer will not affect the institutional controls in place under this Order and the RCRA statute, 42 U.S.C. §§ 6901-6992k. The requirements of this paragraph are effective for the duration of this Order.

IV. DETERMINATIONS OF FACT AND LAW

7. Keystone, a corporation, is a "person" within the meaning of section 1004(15) of RCRA, 42 U.S.C. § 6903(15).

8. Because Keystone has owned and operated the Peoria manufacturing plant since at least 1955, Keystone is the owner or operator of a facility that has operated under interim status subject to section 3005(e) of RCRA, 42 U.S.C. § 6925(e).

9. Certain hazardous wastes and hazardous constituents, as defined in sections 1004(5), and 3001 of RCRA and 40 C.F.R. part 261, are present at Keystone's Peoria facility.

10. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Keystone's Peoria facility.

11. The actions required by this Order are necessary to protect human health and the environment.

12. Keystone represents that it has the technical and financial ability to proceed with corrective action at the facility under this Order.

V. PROJECT MANAGER

13. U.S. EPA and Keystone will each designate a Project Manager and will notify each other in writing of the Project Manager each has selected within 14 days of the effective date of this Order. Each Project Manager will be responsible for overseeing the implementation of this Project. The parties will provide prompt written notice whenever they change Project Managers.

VI. WORK TO BE PERFORMED

14. Pursuant to section 3008(h) of RCRA, and with Keystone's acquiescence, U.S. EPA orders Keystone to perform the following work in a manner consistent with this Order. Keystone will ensure that all work undertaken pursuant to this Order will be performed in compliance with RCRA and all other laws and regulations, and consistent with U.S. EPA guidance documents. This guidance includes the "Documentation of Environmental Indicator Determination Guidance," portions of the "Model Scopes of Work for RCRA Corrective Action" and of U.S. EPA's risk assessment guidance.

15. Keystone must determine the nature and extent of releases of hazardous waste and hazardous constituents at or from the following five Solid Waste Management Units (SWMU) at the facility: (1) the sheen pond, (2) the f-pond, (3) the tail track landfill, (4) the pond east of the tail track landfill and (5) the cooling pond oil skimming basin. Keystone must do at least the following:

    a. Provide to U.S. EPA, within 60 days after the effective date of this Order, a brief current conditions report which includes any recent sampling data from the facility, a summary of the historic operations and physical setting of the facility. The report will describe, at a minimum, conditions at all locations specified in the report "RCRA Facility Assessment Report," including the October 27, 1997, visual site inspection and the December 8 and 9, 1987, sampling activities. This report must also include any other past or present locations at the facility for which Keystone knows of past treatment, storage or disposal of hazardous waste or hazardous constituents.

    b. Identify the nature and extent of any releases of hazardous waste or hazardous constituents from those areas identified above and any other past or present locations at the facility where past waste treatment, storage or disposal may pose an unacceptable risk to human health or the environment. Keystone must provide a report to U.S. EPA summarizing the results of this investigation. The report must also describe the nature and extent of any releases of hazardous waste or hazardous constituents at or from the facility which do not pose an unacceptable risk to human health or the environment, and provide the basis for this conclusion, including an evaluation of the risks. The report may be prepared in phases to provide timely support for the demonstrations described in Section VI.16, below, and for the determinations and proposal described in Section VI.17, below.

c. Keystone may proceed with remedial actions to limit site investigation or risk assessment activities to complete the work required by Sections VI.16 and VI.17 below.

16. By 1/30/2002, Keystone must submit an environmental indicators report and perform any other necessary activities, consistent with this Section, that:

a. Keystone has contained all current human exposures to contamination at or from the facility, including from all Solid Waste Management Units, Hazardous Waste Management Units and Areas of Concern at or from the Facility. That is, for all media known or suspected to be contaminated with hazardous wastes or hazardous constituents above risk-based levels, for which there are complete pathways between contamination and human receptors, significant or unacceptable exposures do not exist.

b. Keystone has stabilized the migration of contaminated groundwater at or from the facility. That is, the migration of all groundwater known or reasonably suspected to be contaminated with hazardous wastes or hazardous constituents above acceptable levels is stabilized to remain within any existing areas of contamination determined by monitoring locations designated at the time of the demonstration. In addition, stabilization also means that any discharge of groundwater to surface water is either insignificant or shown to be currently acceptable according to an appropriate interim assessment. Keystone must collect and maintain data as necessary to verify that the migration of contaminated groundwater is stabilized.

17. To prepare for and provide the demonstrations required by Sections VI.16.a and VI.16.b., above, Keystone must:

a. Determine appropriate risk screening criteria under current use scenarios and justify use of these criteria.

b. Determine any current unacceptable risks to human health and the environment and describe why other identified risks are acceptable.

c. Control any unacceptable current human exposures that are identified. This may include performing any corrective actions or other response measures necessary to control current human exposures to contamination to within acceptable risk levels.

d. Stabilize the migration of contaminated groundwater. This may include implementing any corrective measures necessary to stabilize the migration of contaminated groundwater.

e. Conduct groundwater monitoring to confirm that any contaminated groundwater remains within the original area of contamination.

f. Prepare a report, either prior to or as part of the environmental indicators report, that describes and justifies any interim actions performed to meet the requirements of this Section, including sampling documentation, construction completion documentation and confirmatory sampling results.

18. By January 30, 2003, Keystone must propose to U.S. EPA any final corrective measures for the five solid waste management units identified in paragraph 15 (the sheen pond, the f-pond, the tail track landfill, the pond east of the tail track landfill and the cooling pond oil skimming basin) that are necessary to protect human health and the environment. This proposal must describe all corrective measures implemented at the five units since the effective date of this Order. It must also describe all other final corrective measures for the five units evaluated by Keystone, explain why Keystone selected the final proposed corrective measures, and provide cost estimates for the final corrective measures. The proposal must also include a detailed schedule to construct and implement the final corrective measures for the five units, and to submit a final remedy construction completion report. This schedule must provide that Keystone will complete as much of the initial construction work for the five units as practicable within one year after U.S. EPA selects the final corrective measures and that Keystone will complete all final corrective measures within a reasonable period to protect human health and the environment.

a. In developing its proposal, Keystone must propose appropriate risk screening criteria, cleanup objectives, and points of compliance under current and reasonably expected future land use scenarios and provide the basis and justification for these decisions.

b. U.S. EPA may request supplemental information from Keystone if U.S. EPA determines that the proposal and supporting information do not provide an adequate basis for selection of final corrective measures to protect human health and the environment from the release of hazardous waste or hazardous constituents at or from the five solid waste management units. Keystone must provide such supplemental information in a timely manner as directed in writing by U.S. EPA.

c. U.S. EPA must provide the public with an opportunity to review and comment on its proposed final corrective measures, including a detailed description and justification for the proposal (the "Statement of Basis"). Following the public comment period, U.S. EPA

will select the final corrective measures Keystone must perform for the five units and will state its decision and rationale in a "Final Decision and Response to Comments" ("Final Decision").

d. Upon notification by U.S. EPA, Keystone must implement the final corrective measures for the five units selected in U.S. EPA's Final Decision and in accordance with the schedule therein.

19. Reporting and other requirements:

a. Keystone must establish a publicly accessible repository for information regarding site activities and conduct public outreach activities.

b. Keystone must provide quarterly progress reports to U.S. EPA by the 15th day of each month following a calendar quarter detailing work performed to date, data collected, problems encountered, project schedule, and percent project completed.

c. The parties will communicate frequently and in good faith to assure successful completion of the requirements of this Order, and will meet on at least a semi-annual basis to discuss the work proposed and performed under this Order.

d. Keystone must provide a final remedy construction completion report documenting all work that Keystone has performed pursuant to the schedule in U.S. EPA's Final Decision selecting the final corrective measures.

e. If ongoing monitoring or operation and maintenance is required after construction of the selected final corrective measures, Keystone must include an operations and maintenance plan in the final remedy construction completion report. Keystone will revise and resubmit the report to respond to U.S. EPA's written comments, if any, by the due dates specified by U.S. EPA. Upon U.S. EPA's written approval, Keystone must implement the approved operation and maintenance plan according to the schedule and provisions in the report.

f. Any risk assessments conducted by Keystone must estimate human health and ecological risk under reasonable maximum exposure for both current and reasonably expected future land use scenarios. Keystone must conduct its risk assessments according to the Risk Assessment Guidance for Superfund ("RAGS") or other appropriate U.S. EPA guidance. Keystone must use appropriate, conservative screening values when screening to determine whether further investigation is required. Appropriate screening values include those derived from federal maximum contaminant levels, U.S. EPA Region 9 Preliminary

Remediation Goals, U.S. EPA Region 5 Ecological Screening Levels, U.S. EPA Region 5 Risk Based Screening Levels, and U.S. EPA Region 3 Risk Based Concentration Table, or RAGS.

g. Keystone must perform all sampling and analysis under this Order in conformity with the Region 5 RCRA Quality Assurance Project Plan (QAPP) Policy (April 1998). This sampling and analysis must be sufficient to identify and characterize the nature and extent of all releases described by this Order. U.S. EPA may audit laboratories selected by Keystone or require Keystone to purchase and have analyzed any performance evaluation samples selected by U.S. EPA which are compounds of concern. Keystone must notify U.S. EPA in writing at least 14 days prior to beginning each separate phase of field work performed under this Order. At U.S. EPA's request, Keystone will provide or allow U.S. EPA and its representative to take split or duplicate samples of all samples collected by Keystone pursuant to this Order.

20. The project managers may agree in writing to extend any deadline contained in this Section. The Chief; Enforcement and Compliance Assurance Branch; Waste, Pesticides and Toxics Division, must approve any extension of more than three months.

VII. ACCESS

21. Upon reasonable notice, and at reasonable times, U.S. EPA and its representatives may enter and freely move about the facility pursuant to this Order for the purposes of: a) interviewing facility personnel and contractors; b) reviewing the Keystone's progress in carrying out the terms of this Order; c) conducting any tests, sampling, or monitoring U.S. EPA deems necessary; d) using a camera, sound recording, or other documentary type equipment; e) and verifying the reports and data submitted to U.S. EPA by Keystone. Keystone will permit such persons to inspect and copy all non-privileged records, files, photographs, documents, including all sampling and monitoring data, pertaining to work undertaken under this Order and that are within the possession or under the control of Keystone or its contractors or consultants.

22. To the extent that Keystone must perform work under this Order beyond the facility property boundary, Keystone will use its best efforts to obtain access agreements necessary to complete work required by this Order from the present owners of the property within 30 days of the date the need for access becomes known to Keystone. Any access agreement will provide for access by U.S. EPA and its representatives. Keystone will insure that U.S. EPA's Project Manager has a copy of any access agreement(s). If agreements for access are not obtained within 30 days, Keystone will notify U.S.

EPA in writing within 14 days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. EPA may, at its discretion, assist Keystone in obtaining access.

23. Nothing in this Section limits or otherwise affects U.S. EPA's right of access and entry pursuant to applicable law, including RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601-9675.

VIII. RECORD PRESERVATION

24. Keystone will retain for at least six years after termination of the entire Order, all data and all final records and documents now in its possession or control or which come into its possession or control which relate in any way to this Order. Keystone will notify U.S. EPA in writing 90 days prior to destroying any such records, and provide U.S. EPA with the opportunity to take possession of any such non-privileged records. The written notification will reference the effective date, caption, and docket number of this Order and will be addressed to:

Director
Waste, Pesticides and Toxics Division
U.S. EPA, Region 5
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Keystone will also promptly provide a copy of any such notification to U.S. EPA's Project Manager.

25. Keystone further agrees that within 30 days of retaining or employing any agent, consultant, or contractor ("agents") to carry out the terms of this Order, Keystone will enter into an agreement with the agents requiring the agents to provide Keystone a copy of all data and final non-privileged documents produced pursuant to this Order.

26. Keystone will not assert any privilege claim concerning any data developed to prepare any reports or conduct any investigations or other actions required by this Order.

IX. STIPULATED PENALTIES

27. Keystone will be subject to the following stipulated penalties:

a. For failure to submit quarterly progress reports by the dates scheduled in Section VI.18: $1,000 per day for the first 14 days and $2,000 per day thereafter.

b. For failure to adequately demonstrate that current human exposures are under control by 4/30/2002: $3,000 per day.

c. For failure to adequately demonstrate that groundwater migration is stabilized by 4/30/2002: $3,000 per day.

d. For failure to submit the Final Corrective Measures Proposal in Section VI.17 by 7/30/2003: $1,000 per day for the first 14 days and $2,000 per day thereafter.

e. For failure to initiate work in accordance with the approved schedule, the selected final corrective measures as described in Section VI.17: $3,000 per day for the first 14 days and $6,000 per day thereafter.

f. For failure to submit the Final Remedy Construction Completion Report as scheduled in Section VI.17: $1,000 per day for the first 14 days and $2,000 per day thereafter.

g. For failure to submit the Current Conditions Report required in Section VI.15 within 60 days after the effective date of the Order: $500 per day for the first 14 days and $1,000 per day thereafter.

28. Whether or not Keystone has received notice of a violation, stipulated penalties will begin to accrue on the day a violation occurs, and will continue to accrue until Keystone complies. Stipulated penalties will not accrue under subparagraphs 29(b) and © above until U.S. EPA notifies Keystone in writing of any deficiency in the demonstrations required under paragraph 16, above. Stipulated penalties will accrue simultaneously for separate violations of this Order.

29. Keystone must pay all penalties owed to the United States under this Section within 30 days of receiving U.S. EPA's written demand for payment of the penalties, unless Keystone invokes the dispute resolution procedures under Section X. A written demand will describe the violation and will indicate the amount of penalties due.

30. Interest will begin to accrue on any unpaid stipulated penalty balance 31 days after Keystone receives U.S. EPA's demand letter. Interest will accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, Keystone must pay a penalty of six percent a year on any unpaid principal more than 90 days overdue.

31. Keystone must pay all penalties by certified or cashier's check payable to the United States of America, or by wire transfer, and must remit them to:

U.S. Department of the Treasury
Attention: U.S. EPA Region 5, Office of the Comptroller
P.O. Box 70753
Chicago, Illinois 60673.

32. All such checks must reference the name of the facility, Keystone's name and address, and the U.S. EPA docket number of this action. Keystone must send copies of all checks and letters forwarding the checks simultaneously to the U.S. EPA Project Coordinator.

33. Keystone may dispute U.S. EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section X. The stipulated penalties in dispute will continue to accrue, but need not be paid, during the dispute resolution period. Keystone will pay stipulated penalties and interest, if any, in accordance with the dispute resolution decision or agreement. Keystone will submit such payment to U.S. EPA within 30 days of receiving the resolution according to the payment instructions of this Section.

34. Neither invoking dispute resolution nor paying of penalties will alter in any way Keystone's obligation to comply with the terms of this Order not directly in dispute.

35. The stipulated penalties set forth in this section do not preclude U.S. EPA from pursuing any other remedies or sanctions for Keystone's violation of any term of this Order. However, U.S. EPA will not seek both a stipulated penalty under this section and a statutory penalty for the same violation.

X. DISPUTE RESOLUTION

36. The parties will use their best efforts to informally and in good faith resolve all disputes or differences of opinion.

a. If either party disagrees, in whole or in part, with any decision made or action taken pursuant to this Order, that party will notify the other party's Project Manager of the dispute. The Project Managers will attempt to resolve the dispute informally.

b. If the Project Managers cannot resolve the dispute informally, either party may pursue the matter formally by objecting in writing. A written objection must set forth the specific points of the dispute, the basis for that party's position, and any matters which it considers necessary for determination.

c. U.S. EPA and Keystone will in good faith attempt to resolve the dispute through formal negotiations within 21 days, or a longer period if agreed in writing by the parties. During formal negotiations, either party may

request a conference with appropriate senior management to discuss the dispute.

d. If the parties do not resolve the dispute through formal negotiations, within 14 business days after any formal negotiations have concluded, Keystone and U.S. EPA's Project Manager may submit additional written information to the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5. U.S. EPA will maintain a record of the dispute, which will contain all statements of position and any other documentation, submitted pursuant to this Section. U.S. EPA will allow timely submission of relevant supplemental statements of position by the parties to the dispute. Based on the record, U.S. EPA will respond to Keystone's arguments and evidence and provide Keystone its detailed written decision on the dispute signed by the Director of the Waste, Pesticides and Toxics Division, U.S. EPA Region 5 ("EPA Dispute Decision").

e. Disputes over final Corrective Measures - Any U.S. EPA Dispute Decision regarding final Corrective Measures will not be considered final agency action for purposes of Keystone initiating judicial review. However, if U.S. EPA takes any enforcement action regarding an EPA Dispute Decision, Keystone may assert all arguments or defenses available to it.

XI. FORCE MAJEURE AND EXCUSABLE DELAY

37. "Force majeure," for purposes of this Order, is any event arising from causes unforeseen and beyond the control of Keystone that delays or prevents the timely performance of any obligation under this Order despite its best efforts.

38. If any event occurs or has occurred that may delay performing any obligation under this Order, whether or not caused by a force majeure event, Keystone must notify U.S. EPA within two business days after learning that the event may cause a delay. If Keystone wishes to assert force majeure, Keystone must provide to U.S. EPA in writing all relevant information relating to its assertion, including its proposed revised schedule.

39. If U.S. EPA determines that a delay or anticipated delay constitutes force majeure, U.S. EPA must extend in writing the time to perform the obligation that is affected by the force majeure event for the period that U.S. EPA determines is necessary to complete the obligation.

XII. MODIFICATION

40. The parties may modify this Order by mutual agreement, except as provided for in Section VI. Any agreed modifications must be in writing, signed by both parties, state an effective date as the date signed by U.S. EPA, and will be incorporated into this Order.

XIII. RESERVATION OF RIGHTS

41. U.S. EPA reserves all rights granted to it by law and statutory authority, including the assessment of penalties and pursuit of an injunction to enforce the terms of this Order under section 3008(h)(2), 42 U.S.C. § 6928(h)(2). This Order is not a covenant not to sue, release, waiver or limitation of U.S. EPA's rights.

42. U.S. EPA reserves all rights to perform any portion of the work described in this Order and any additional site characterization, feasibility studies, and remedial work as it deems necessary to protect human health and the environment.

43. If U.S. EPA determines that Keystone's actions under this Order have caused or may cause: a) a release of hazardous waste or hazardous constituents, or b) a threat to human health or the environment, or c) that Keystone is not capable of undertaking any of the work ordered, U.S. EPA may order Keystone to cease its actions under the Order for as long as U.S. EPA determines necessary to abate any release or threat and to undertake any action which U.S. EPA determines necessary to abate such release or threat.

44. While U.S. EPA may review and comment on documents not required by this Order and prepared by Keystone, U.S. EPA has no obligation to do so and any comments made informally will not relieve Keystone of its obligation to achieve the required cleanup or performance standards or to obtain any necessary permits.

45. Keystone does not admit any of the factual or legal determinations made by the U.S. EPA. Except for the specific waivers contained in this Order, Keystone reserves all of its rights: (a) to challenge U.S. EPA's performance of work; (b) to challenge U.S. EPA's stop work orders; and (c) regarding liability or responsibility for conditions at the facility, except for its right to contest U.S. EPA's jurisdiction to issue or enforce this Order. Keystone enters into this Order in good faith without trial or adjudication of any issue of fact or law. Keystone reserves its right to seek judicial review of U.S. EPA actions taken under this Order, including a proceeding brought by the United States to enforce the terms of this Order or to collect penalties for violations of the Order.

46. In any subsequent administrative or judicial proceeding initiated by the United States to compel or enjoin any activity at the facility, Keystone may not assert the contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XIV. OTHER CLAIMS

47. Nothing in this Order constitutes a release from any liability to third persons relating to Keystone's obligations under this Order. Keystone waives any claims or demands for compensation or payment under sections 106(b), 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611, 9612, against the United States or the Hazardous Substance Superfund for any expense incurred pursuant to this Order. Additionally, this Order is not any decision on preauthorization of funds under §111(a)(2) of CERCLA.

XV. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

48. Keystone indemnifies, saves and holds harmless the United States Government, its agencies, departments, agents, and employees, from any and all claims or causes of action arising from or on account of acts or omissions of Keystone or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Order. This indemnification does not affect or limit the rights or obligations of Keystone or the United States under their various contracts.

XVI. SEVERABILITY

49. If any judicial or administrative authority invalidates any provision of this Order, the balance of the Order will remain effective with regard to Keystone and any third parties affected.

XVII. TERMINATION AND SATISFACTION

50. Keystone may request that U.S. EPA issue a determination that the requirements of the Order have been met for all or a portion of the facility. Keystone may also request that U.S. EPA issue a no further interest or no further action determination for all or a portion of the facility.

51. Upon U.S. EPA's satisfaction that Keystone has discharged all its obligations under the Order, Keystone and U.S. EPA may execute an "Acknowledgment of Termination and Agreement on Record Preservation and Reservation of Rights", consistent with U.S. EPA's Model Scope of Work.

52. Keystone's execution of the acknowledgment will affirm its continuing obligation to preserve all records as required by Section VIII, to maintain any necessary institutional controls or other long terms measures, and to recognize U.S. EPA's reservation of rights stated in Section XIII.

XVIII. EFFECTIVE DATE

53. The effective date of this Order will be the date U.S. EPA has signed the Order. 42 U.S.C. §§ 6901-6992k

IT IS SO AGREED:

DATE: 11/20/00 BY: _____

Russ R. Perry, Manager
Environmental Engineering
Keystone Steel & Wire CO.

IT IS SO ORDERED:

DATE: December 19, 2000 BY: _____

Joseph M. Boyle, Chief
Enforcement & Compliance
Assurance Branch
Waste, Pesticides and Toxics
Division

U.S. Environmental Protection Agency
Region 5